98th Congress
1st Session

COMMITTEE PRINT

S. PRT.
98-48

FINANCING WORK-RELATED ENTITLEMENT PROGRAMS

A REPORT

PREPARED BY THE
CONGRESSIONAL RESEARCH SERVICE

FOR THE

COMMITTEE ON THE BUDGET
UNITED STATES SENATE

APRIL 1983

Printed for the Use of the Committee on the Budget

U.S. GOVERNMENT PRINTING OFFICE
16-535 O
WASHINGTON : 1983

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

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United States Senate
COMMITTEE ON THE BUDGET
WASHINGTON, D.C. 20510

September 22, 1982

Mr. Gilbert Gude
Congressional Research Service
Library of Congress LM 203
Washington, D.C. 20540

Dear Mr. Gude:

A major challenge facing the Congress is to devise appropriate policies for the large social insurance and other work-related benefit programs for those no longer expected to work. These programs are Social Security (OASDI), Medicare, Civil Service Retirement, Railroad Retirement, and Military Retirement. Benefits of these programs are tied to previous employment and hence are considered earned rights by many recipients and policymakers. Beneficiaries are retired or disabled workers and their dependents and survivors. Persons younger than 65 years receive a sizable portion of the benefits.

Costs of these programs are growing at a rapid rate. In FY 1976, Federal costs for the five programs mentioned above totalled $110 billion. In FY 1985 they are projected to cost $318.5 billion--growth of $209 billion, 191 percent over FY 1976. These programs were 30 percent of the total Federal budget in FY 1976; in FY 1985 they are projected to constitute 36 percent of the budget.

In preparing for the FY 1984 budget, the Senate Budget Committee requests that the Congressional Research Service (CRS) conduct a study of these work-related benefit programs.

Issues related to financing these programs (short-term, long-term, and the relationship between them) should be the theme of the study. Issues and concepts of program financing are often poorly stated and frequently misunderstood. Most of the programs have trust funds, and discussions of such confusing concepts as "unfunded liabilities" often characterize debates about possible changes in the programs. Implications of these and other financing features often are not analyzed.

The Committee is particularly concerned about how financing issues, both short- and long-run, relate to the overall Federal budget. The current and projected benefits promised by the programs must be examined in light of the capacity to pay for them. The Committee would like CRS to provide an analysis of broad options for dealing with the financial issues.

The Committee would be interested in the similarities and differences between the programs themselves, and between them and comparable programs in the private sector. However, we recognize that the programs differ from each other in how they are financed and the nature of the financing issues. We would expect these differences to be reflected in individual program analyses.

Mr. Gilbert Gude
September 22, 1982
Page two

To be of greatest use to the Committee we need the report by the end of January 1983, in time for Congressional action on the FY 1984 budget. Michael Carozza (224-0564, majority) and John Nelson (224-0550, minority) of the Budget Committee staff will be available to consult with CRS throughout the project. Thank you.

Sincerely,

Ernest F. Hollings
Ranking Minority Member

Pete V. Domenici
Chairman

LETTER OF TRANSMITTAL

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

February 28, 1983

Honorable Pete V. Domenici
Chairman, Senate Budget Committee
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Your letter of September 22, 1982 asked the Congressional Research Service (CRS) to conduct a study of certain large social insurance and pension programs referred to as "work-related" entitlement programs. You noted that devising appropriate policies for these politically sensitive programs constitutes a "major challenge facing the Congress."

You asked specifically that CRS focus the analysis on issues related to financing these programs which frequently are "poorly stated and misunderstood." According to your letter, the Senate Budget Committee is particularly concerned about how financing issues relate to the overall Federal budget. You asked CRS to examine the projected benefit payments in light of the capacity to pay for them, and to provide an analysis of broad options for addressing the financial issues.

In response to your request, I am pleased to submit this report, "Financing Work-Related Entitlement Programs." P. Royal Shipp, Senior Specialist in Social Legislation managed the study and wrote two introductory chapters--a summary and conclusions and an overview of the study. Definitive chapters on individual programs were written by CRS program specialists: social security, by David Koitz; Medicare, by Glenn R. Markus; civil service retirement and railroad retirement, by Dennis Snook; and military retirement, by Paul C. Zinsmeister.

In addition, appendix information is provided which broadens the context for viewing the programs' financing issues. Appendix authors were: Kathleen Swendiman from the American Law Division; Mary Smith and Michael O'Grady from the Education and Public Welfare Division; Pamela Espenshade from the Senior Specialists Division; and Margaret Glavin from the Department of Agriculture.

Actuarial cost estimates for the five programs were provided by the Office of the Actuary from five departments and agencies: Department of Defense, Social Security Administration, Health Care Financing Administation, Office of Personnel Management, and the Railroad Retirement Board. For part of the analysis, these actuaries based their projections on a common set of economic and demographic assumptions specified by the CRS--assumptions II-B and III as defined in the 1982 report of the Trustees of the Social Security Trust Funds. To ensure completeness and consistency of the actuarial data, certain modifications were made by Edwin C. Hustead, F. S. A., of Hay Associates.

Mary L. Bradford, editorial consultant, assisted with editing several chapters of the study.

We hope this report meets the needs of the Senate Budget Committee and of the Congress as they deal with the difficult issues of financing work-related entitlement programs.

Sincerely,

Gilbert Gude
Director

LETTER OF TRANSMITTAL

WILLIAM L. ARMSTRONG, COLO.
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United States Senate
COMMITTEE ON THE BUDGET
WASHINGTON, D.C. 20510

MEMORANDUM

TO: SENATE BUDGET COMMITTEE MEMBERS

SUBJECT: REPORT ON "FINANCING WORK-RELATED ENTITLEMENT PROGRAMS"

DATE: MARCH 24, 1983

Major challenges face the Congress in devising appropriate policies for financing work-related social insurance, pension, and medical care programs for retired and disabled Americans. Five programs -- Social Security, Medicare, Railroad Retirement, Federal Civilian Retirement and Military Retirement -- account for one-third of all federal expenditures. The issues related to financing these programs are quite complex and have major implications for overall federal fiscal policy.

Last summer, the Committee requested the Congressional Research Service of the Library of Congress to prepare a major study of financing issues in these work-related entitlement programs. It was clear that federal policies on the financing of these programs would continue to undergo intensive examination. We sought to provide Committee members and the Congress as a whole with a comprehensive discussion of the issues.

We believe the report which has now been completed will be of considerable help to the Budget Committee, as well as to other Congressional committees and individual members, as they consider the financing of the programs addressed in the report.

Issuance of this report as a Budget Committee print does not, of course, in anyway imply that the Committee endorses the conclusions stated or the information presented.

Work on this report was completed prior to Congressional action on the recommendations of the National Commission on Social Security Reform. While the adoption of H.R. 1900 resolves for now some of the issues discussed in the report, regarding social security financing, the information in the report is still quite relevant to issues Congress will be confronting in the months and years ahead.

We thank the Congressional Research Service for the extensive effort required to produce this report. We commend the individual staff members, whose names are listed in the following letter from Gilbert Gude, for their dedicated work.

Lawton Chiles
Lawton Chiles
Ranking Minority Member

Pete V. Domenici
Chairman

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Chapter I

Summary and Conclusions

by

P. ROYAL SHIPP

Senior Specialist in Social Legislation

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SUMMARY AND CONCLUSIONS

INTRODUCTION

Five work-related entitlement programs are covered by this study; namely, social security, medicare, civil service retirement, military retirement, and railroad retirement. The first two are basic social insurance programs, and the latter three are large Federal pension systems. All provide benefits for retired or disabled workers and survivors, and some assist dependents as well. Collectively, they now make payments to nearly one in every five Americans.

This study defines work-related entitlement programs as those that base eligibility for benefits and size of benefits upon work histories and earnings records. Eligibility is earned by working a certain number of years and reaching a specified birthday. Benefit amounts (except for medicare) are determined by the amount of earnings (indexed over a lifetime or an average of recent years) combined with the number of years worked. Each program's basic legislation contains the rules for eligibility and benefits. All people who are eligible have a right to receive benefits. Work-related entitlements are distinguished from "welfare" entitlements, which pay benefits only to those whose incomes and assets are within program limits. But in the case of both work-related and welfare entitlements, eligibility rules and benefit formulas can be changed only by revising basic legislation. The statutory rules that determine expenditure levels remain largely outside the reach of the appropriation process.

Problems with financing social security and railroad retirement, and to a lesser extent, medicare and civil service retirement, have dominated policy debates in recent years. Federal outlays for work-related entitlement programs stand at $253 billion for fiscal year 1983,[1] about one-third of the total budget. These outlays grew from $1.8 billion in 1950, 4 percent of the budget, and could more than double over the next 10 years. Except for military retirement, the programs are all financed through trust funds. Sometimes financing issues are raised because of deficits in these trust funds that can prevent payments from being made on time unless legislative action occurs and sometimes simply because the programs constitute a large, growing, and "uncontrollable" share of total Federal spending.

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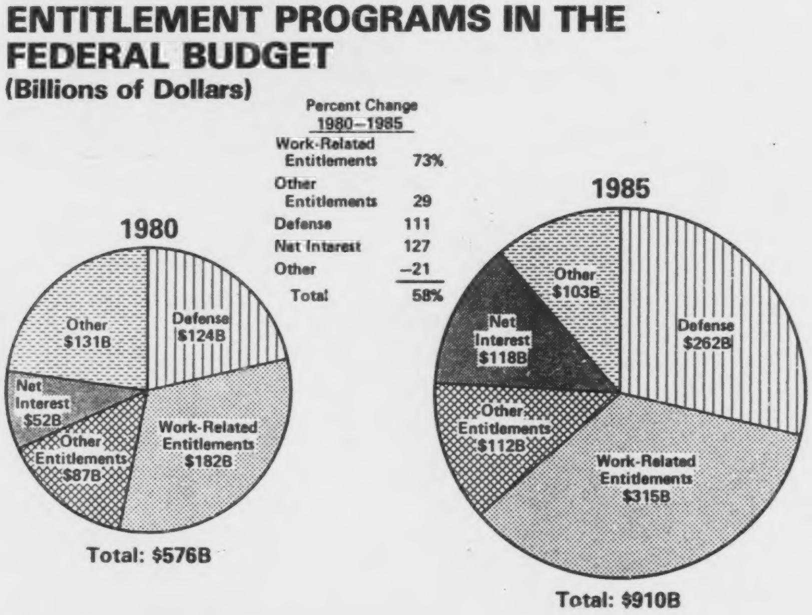
[1] Estimates in this report for 1983 and subsequent years are actuarial projections and will differ somewhat from official budget estimates submitted as part of the 1984 budget. They were made during the fall of 1982 by actuaries of the five work-related entitlement programs using two sets of economic and demographic assumptions developed by the Board of Trustees of the social security system for its 1982 report.

Even without any congressional action to change benefit rules, spending for work-related entitlements will grow automatically in the future. The Congress will be engaged in strenuous debate and asked to make difficult decisions over whether or not to approve a presidential program that would authorize and appropriate a spending level for national defense $138 billion higher in 1985 than in 1980, based on spending policies embodied in the First Budget Resolution for 1983. During the same period, spending on work-related entitlements was estimated to rise automatically by approximately the same amount (see chart 1).

CHART 1



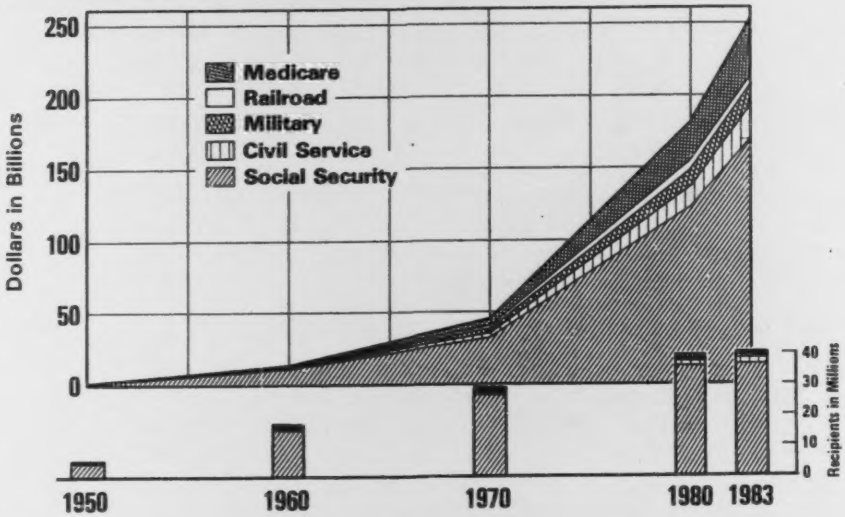
Source: Congressional Budget Office.

The largest increases in program expenditures have taken place since 1970 (chart 2). Benefit payments grew fivefold, from under $50 billion in 1970 to over $250 billion in 1983. Other budget expenditures grew only 70 percent as fast during the same period. The number of recipients has steadily increased in the past three decades, rising from 4.2 million in 1950 to 29 million in 1970. In the 13 years since 1970, an additional 11 million recipients joined the rolls, pushing the total above 40 million—about one-fifth of the total population. This rapid growth since 1970 was caused by new recipients, price inflation, the effect of real economic growth of earlier years, and benefit increases enacted in the 1960's and early

1970's. These same conditions will cause further increases in later years.

CHART 2

SIZE AND GROWTH OF WORK-RELATED ENTITLEMENTS
(Recipients in millions and Dollars in billions)



Source: Social Security Administration; 1982 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds; 1982 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund; Office of the Actuary, Department of Defense; for Source of 1983 data, see Chart 3.

THE FINANCING DEVICES: TRUST FUNDS AND THE GENERAL FUND

Financing of the programs under discussion is effectively pay-as-you-go; in other words, current benefit payments depend upon current revenue coming into the Government accounts. Ultimately, all revenue comes from taxes and from sale of bonds to the public.

Two basic types of financing devices are used to collect taxes and make benefit payments for these programs: four of the five programs make payments through trust funds while military retirement benefits are appropriated from the general fund. There are two basic distinctions between these two financing devices:

(1) Revenues

Most trust fund revenue for social security, medicare, and railroad retirement depends upon special employment-related taxes earmarked for the particular trust fund. Military retirement depends upon revenue from the general fund. Civil service retirement has a trust fund but nonetheless relies largely on general revenues to make benefit payments. The general fund finances two-thirds of the Federal Government's activity. Its main sources of revenue are individual income taxes, corporation income taxes, and excise taxes. These taxes that support the general fund are not earmarked for any particular activity.

One immediately relevant consequence of this distinction in financing devices is that while social security, medicare, and railroad retirement face imminent revenue shortages (their earmarked income is not sufficient to meet outgo), military retirement, financed from general revenues, and civil service retirement, financed mostly from general revenues, face no such "shortage."

(2) Benefit Payments

Under current law, most of the revenue for the four trust fund programs is automatically appropriated (made available) for benefit payments. Appropriation of general revenue for military retirement occurs through the annual appropriation process. Neither this distinction nor the revenue source distinction makes military retirement any less an "entitlement" than the trust fund programs. For all five programs there is a legal obligation to pay the entitled benefits that stands until the law is changed, regardless of financing device.

Trust funds, accounts set up in the Department of the Treasury, are mechanisms for collecting taxes for specified purposes and making disbursements for these same purposes. In fiscal year 1983, outlays from all Federal trust funds were estimated at $281 billion, of which 90 percent were work-related entitlements. Civil service retirement has the largest Federal trust fund balances, larger even than social insurance trust funds which make payments for social security and medicare. Assets in the civil service retirement trust fund were largely derived from financial transactions between separate accounts inside the Federal budget. The trust funds for social security, medicare (hospital insurance), and railroad retirement receive virtually all their revenue from *outside* the Government, namely from payroll taxes.

All trust fund assets consist of the Federal Government's own securities. Therefore, the existence of trust fund assets constitutes an assurance that the benefit payments of a particular amount will be maintained that is only as strong as the Government's will and ability to pay it. In effect, trust fund assets are an I O U the Government has written itself. They represent a commitment that when it becomes necessary to actually make benefit payments, these commitments will be met by raising taxes or borrowing.

Comparing military retirement, social security, and civil service retirement highlights trust fund operations. The Federal Government has made entitlement commitments for benefit payments in all three programs explicit in current benefit formulas. These commitments, which can be modified by the Congress, exist *whether there is a trust fund or not.*

The *military retirement* system has no trust fund. It is necessasry to appropriate sums each year from the general fund sufficient to meet the obligations. The lack of a trust fund does not lessen these obligations.

In theory, *social security* is self-financing, meaning that revenues flowing into the trust fund should be large enough to meet current benefit payments. For a number of years, social security's trust fund balance has been small compared to total revenues and payments, but whether it is large or small has no effect on the future obligation to make benefit payments. Whether the trust fund is growing or shrinking does have an effect on the Federal Government's need to raise taxes or to borrow from the public.

The *civil service retirement* trust fund balance now exceeds $100 billion, with growth in the fund occurring largely because some Federal accounts transfer funds to some others—all inside the Federal budget. These transactions have *no effect on outlays or the Federal deficit—now or in the future.* The civil service trust fund balance represents an I O U the Government owes to itself. As long as projected benefit payments exceed income to the fund from employee contributions, an increasing gap, the difference must be made up by payments from general revenues. In fiscal year 1983, it is estimated that payments into the civil service trust fund from outside the Government (employee contributions) will be $4.7 billion. Benefit outlays will be five times that amount, a total of $21.8 billion, and the remaining $17.1 billion will be paid from general revenues.

Not only do trust funds work differently for the different programs, the timing and extent of trust fund shortages are different. The social security trust fund, which depends primarily on payroll taxes for funding, is virtually depleted and will be able to make payments through this year only by borrowing from the medicare trust fund.

Likewise, the *railroad retirement* trust fund is in immediate trouble and, without remedial action, will have to reduce payments to recipients in October 1983 under provisions of the 1981 Amendments Act in order to preserve the fund.

The *medicare* trust fund, which lent $17 billion to social security in December 1982, will face large trust fund shortages by the end of this decade, or earlier, unless the growth in hospital costs slackens.

On the other hand, the *civil service retirement* system trust fund is growing larger and, with a level work force, faces no shortage as far into the future as projections can be made, since the financing mechanisms of the trust fund are designed to create intragovernmental transactions large enough to exceed benefit payments.

And, of course, there can be no trust fund shortage in the *military retirement* system since it has no trust fund.

PROGRAM GROWTH: PRESSURE ON THE BUDGET

Benefit payments from all work-related entitlement programs count as outlays in the unified Federal budget. Their large size and rapid and relatively uncontrollable growth have targeted them for particular concern in the context of the unprecedented deficits projected over the next few years. Policymakers and commentators from Government and private business, representing a wide political spectrum, have called for "curbing the rate of growth of entitlement spending" as necessary to gain control over Federal budget deficits.

Current and projected levels of spending were brought about by benefit liberalizations made over the past 30 years, by additional increases in real benefit levels due to growth in wage levels, by expansion of the eligible population, and by the addition of new programs, medicare being the most significant. Specifically, these trends for higher benefit outlays, which are expected to continue, resulted from four causes: (1) the programs began "maturing," (2) additional programs were added during the 1950's and 1960's when favorable economic growth and demographic conditions led to optimistic longrun financing forecasts, (3) benefit levels of all programs were increased during the 1950's, 1960's, and early 1970's, and (4) people live longer than had been projected when the programs were created or liberalized.

(1) Maturing Programs

Pay-as-you-go systems are easy to finance in the early years since, with this type of financing, current workers pay for benefits of the retired generation. Compared with the number of workers, there are few retirees in the early years of a new program, and benefit payments can be met easily by the large working population. Continued growth in population or rapid expansion in the number of employees in a business or Government agency will be followed some years later by a larger number of retirees. As chart 2 indicates, in 1950, there were 4.2 million recipients being paid $1.83 billion of work-related entitlement benefits. Social security had 3.5 million recipients (it's 10 times greater now) while the two largest pension programs, although much older, were still relatively small. Civil service then paid benefits to 190,000 and military retirement to 130,000 recipients. At that time, railroad retirement, now the smallest with 400,000 enrollees, was larger than the other two Federal pension programs combined. Today social security has 36 million recipients, 10 times more than in 1950. Although the number of social security recipients is growing each year, it will not be a mature system for another generation. Demographic conditions continue to be favorable to social security, and will be favorable until the baby boom generation retires after another 30 to 40 years.

(2) New Program Benefits

During the 1950's and 1960's, when economic and demographic conditions were favorable, features were added to entitlement programs that pushed up subsequent costs. Disability insurance was added to social security in 1956 and the medicare program was enacted in 1965. Railroad retirement was liberalized in ways that matched the social security changes. During this period, civil service retirees were granted the right of retirement at age 55 with unreduced benefits. The military retirement system received similar liberalization earlier in the century.

(3) Increased Benefit Levels

Congress increased social security benefit levels five times in the late 1960's and early 1970's. These five increases, ranging from 7 percent in 1965 to 20 percent in 1972, had a cumulative effect of raising the benefit base by 84 percent. (The result was that when the first automatic cost-of-living adjustment (COLA) occurred in 1975, it was calculated on a higher base.) Railroad retirement benefits were increased by similar percentages.

In addition to ad hoc benefit increases, a 1969 change in the benefit formula in civil service retirement began basing benefits on the high 3 years of salary instead of the high 5, a smaller liberalization.

Beyond these legislated benefit increases, benefit levels have increased automatically, without any specific congressional action, during the period since 1950. In calculating a retiree's *initial benefit,* all programs take into account increases in economic growth and price changes during the person's working years. As a result, initial benefits are higher in real terms with each succeeding year. As long as there is economic growth, these benefit increases occur automatically.

Another automatic feature was added to all work-related entitlement programs. Once a person is on the rolls, benefit levels are linked to changes in the cost-of-living as measured by the Consumer Price Index (CPI). This feature came to the military and civil service retirement systems in 1963, and to social security and railroad retirement in 1972. Full cost-of-living protection is a very costly feature of a pension program—so expensive in fact, that no private plan promises it. The Federal Government can do so only because of taxing power it can use to fulfill pledges.

The medicare program is *not* directly indexed. Nonetheless, its costs have grown fastest in recent years because they are tied directly to hospital costs which have risen at a substantially faster rate than the CPI.

(4) Increased Life Expectancy

Increases in life expectancy have added substantially to program costs, because retirees continue to receive benefits for as long as they live. In 1983, males age 65, on average, can expect to live an additional 14.5 years—1.7 years longer than in 1950. For females, the difference is even greater. Women reaching age 65 in 1983, on average, can expect to live 18.9 additional years—3.8 years longer than their 1950 counterparts. The increasing number of *very old* persons will place additional pressures on the medicare program. Utilization of hospital services increases substantially among the very old.

The interaction of these cost-boosting features led to the sharp rise in program costs since 1950 and particularly during the 1970's. Liberalization of benefits has been stopped and, in fact, the trend is toward deliberalization. However, continuing inflation, the effect of past and future salary and wage growth, and the growth of recipients will increase benefit expenditures if the benefit formulas are not changed.

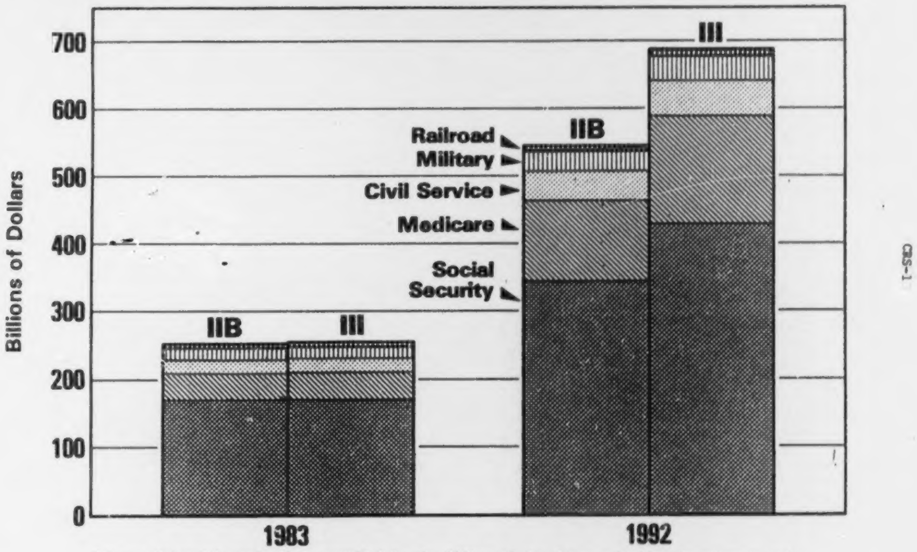
PROJECTED GROWTH IN SHORTRUN COSTS

This study projected future costs for work-related entitlement programs on the basis of economic and demographic assumptions calculated by the Social Security Administration (SSA). Historically, SSA has presented cost projections using three sets of assumptions, optimistic, intermediate, and pessimistic. Social security's so-called II-B assumptions, previously thought to be slightly pessimistic, now are considered to be too optimistic, particularly for the shortrun analysis. Social security's assumptions III, more pessimistic, may be closer to the mark in the short run. Hence, the study projected shortrun and longrun costs of work-related entitlement programs based on both sets of assumptions.

According to these actuarial projections, the costs of the work-related entitlement programs will continue to grow, at least doubling in the next 10 years (under II-B conditions) and conceivably reaching a level 174 percent higher in 1992 than in 1983 (under more pessimistic conditions of assumptions III—see chart 3). If the economy improves as II-B assumes, total costs will increase from their 1983 level of $253 billion to $547 billion in 1992. Spending would rise to $690 billion if the III assumptions should prevail.

CHART 3

TOTAL BUDGET PROJECTIONS FOR WORK-RELATED ENTITLEMENTS



Source: Actuarial projections provided by the Office of the Actuary in five departments and agencies: Social Security Administration, Health Care Financing Administration, Office of Personnel Management, Department of Defense, Railroad Retirement Board. To ensure completeness and consistency, needed modifications of the data were made by Edwin C. Hustead, F.S.A., of Hay Associates.

Source: Acturial projections provided by the Office of the Actuary in five departments and agencies: Social Security Administration, Health Care Financing Administration, Office of Personnel Management, Department of Defense, Railroad Retirement Board. To ensure completeness and consistency, needed modifications of the data were made by Hay Associates.

Social security and medicare account for most of the dollar increase over the shortrun 10-year period. Medicare is expected to grow faster than all other entitlement programs, from $39.5 billion in 1983 to a tripled level of $119.8 billion in 1992 with assumptions II-B. Assumptions III would see medicare four times higher at the end of 10 years.

In the short run, economic forces weigh more heavily than demographic factors. Social security and medicare are more sensitive to overall national economic and demographic conditions than are Federal pension programs, and they are expected to grow the most during the next 10 years.

PROJECTIONS OF LONGRUN COSTS

Actuaries calculate longrun costs of pension and social insurance programs as far ahead as 75 years, in order to provide a measure of the overall program obligation over a population cohort's work life (a time when it is earning retirement credits) and during retirement years, when benefits are drawn based on those credits. A concept called "average percent of payroll" is one basic measure of longrun costs. An estimate is made of the amount of benefits to be paid in each year, and this is divided by the total amount paid in salaries and wages to active employees in that same year. This ratio is the percent of payroll needed to finance benefits in that year. The 75-year average of the ratio is percent of payroll—used here to measure longrun costs. Of course, the payroll is different in each program. Social security's covered payroll includes all salaries and wages against which social security taxes are charged, but for the pension programs, the payroll is simply the amount each agency or industry pays out in wages and salaries.

Percent of payroll is used because dollar terms become so large in the future with even moderate rates of inflation that the frame of reference is lost. In addition, this measure allows comparisons among programs of relative plan generosity and costs.

Chart 4 shows longrun costs for work-related entitlement programs under different economic and demographic assumptions. Two calculations are presented: the pay-as-you-go financing system, and also a method known as "advance funding," a method used for private pensions and the basis used for official valuations of the Federal pension programs. The advance funding cost estimates show the magnitude of the task of setting aside funds over a 40-year period to pay off benefit rights already accrued by employees and retirees, while simultaneously fully funding the eventual retirement of current workers.

CHART 4

CURRENT ESTIMATE OF LONG-TERM COST FOR WORK-RELATED ENTITLEMENTS

(Percent of Payroll)

	INTERGENERATIONAL (PAY-AS-YOU-GO)		ADVANCE FUNDING	
	II-B	III	II-B	III
SOCIAL SECURITY	14.1%	18.7%	23.7%	29.4%
MEDICARE (HI)	7.9%	N/A	N/A	N/A
CIVIL SERVICE RETIREMENT	36.1%	40.6%	51.7%	60.5%
MILITARY RETIREMENT	58.1%	61.8%	92.4%	107.7%
RAILROAD RETIREMENT	14.2%	15.2%	19.8%	20.7%

Source: See chart 3.

From the beginning, social security was expected to be a base on which to build retirement income, not the sole source of retirement income. Indeed, only 12.6 percent of families with a person 65 or older receive income only from social security. The longrun cost of social security, on a pay-as-you-go basis, looks relatively modest at 14.1 percent of payroll (II–B assumptions), about one-third the cost of civil service and one-fourth the cost of military retirement. A typical private pension, integrated with social security, might itself cost roughly 8 to 10 percent of payroll, and, if this were added to the social security, the combination typical in the private sector of social security plus a private pension would cost around 22 to 24 percent of payroll. The railroad retirement cost looks relatively small also (14.2 percent of payroll), only slightly higher than social security. This is just for the private pension component of railroad retirement, which also includes a social security component. Total railroad retirement benefits (including its social security component) would be 28.3 percent of payroll, higher than the private sector counterpart, but still substantially lower than civil service (36.1 percent) and military retirement (58.1 percent).

Civil service and military retirement are more costly because they have more liberal early retirement privileges which result in receipt of benefits for substantially longer. In the military retirement system, payments can begin after 20 years of military service. These benefits will be received during the remainder of the individual's life regardless of other sources of earned or retirement income he may have. At 58.1 percent of payroll, military retirement is by far the most costly of the four retirement systems. In addition, the military retiree will become fully entitled to social security payments which, when added to the military retirement costs, boost the overall cost to 72.2 percent of payroll. Civil service retirement does not cost as much as military retirement, but is much more expensive than most private sector counterparts. The 36.1 percent of payroll cost is due to relatively high average benefit amounts, plus retirement at age 55 with unreduced fully indexed benefits. Some 80 percent of civil service retirees eventually qualify for social security cash payments, thus increasing the overall Federal retirement cost to their retirement income.

The cost of the medicare (HI) program is estimated at 7.9 percent. The maximum HI tax rate now in the law will be 2.9, indicating the serious long-term funding crisis for medicare if the present rate of hospital cost increase continues.

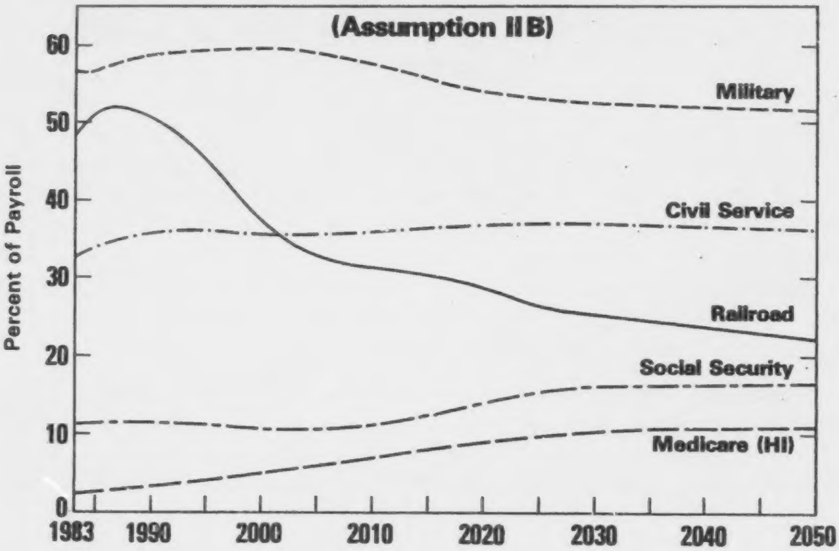
If the more pessimistic III assumptions are used, the costs go up for all systems. They go up most—by a third—for social security, compared to 12 percent for civil service retirement and 6 percent for military retirement. The greater difference for social security is because overall, unfavorable economic and demographic assumptions are more crucial for this universal program than they are for the more contained Federal retirement systems.

Advance funded cost estimates indicate the difference between the current pay-as-you-go approach and the amount required if current unfunded liabilities were amortized over 40 years (private sector plan unfunded liabilities must be amortized over 30 or 40 years) together with advance funding for those workers currently earning retirement credits. This cost is commonly used as a measure of the Federal pension plans. Even for the other programs, these are not entirely hypothetical costs because proposals to privatize social security (make it voluntary or replace it with mandatory private plans) or to dismantle railroad retirement, as proposed by the administration last year, would face this cost situation.

The longrun trend in pay-as-you-go program costs (as a percent of payroll) demonstrates change in the relationship between retirement benefit costs and payroll costs over the period (see chart 5). Social security costs stay constant, and even decline somewhat, until about 2010, when the huge baby boom generation born in the 1946–64 period starts retiring. Military retirement and civil service retirement costs are high but relatively constant over the period, since the assumption was made that their current level of employees would be maintained during the entire period. The eventual decline in military retirement costs will occur after the retirees from the peak years of World War II and the Korean wars leave the rolls. Railroad employment has declined from a peak of 1.4 million immediately after World War II to a current level of 0.4 million—a decline of 1 million. The decline of the cost of the railroad retirement system (including the social security part) over the longrun period reflects the ultimate dying off of the large retired population from earlier high work force levels.

CHART 5

LONG RUN COSTS (PERCENT OF PAYROLL) OF WORK-RELATED ENTITLEMENTS



Source: See chart 3.

MEASURES OF BENEFIT ADEQUACY AND AMOUNT

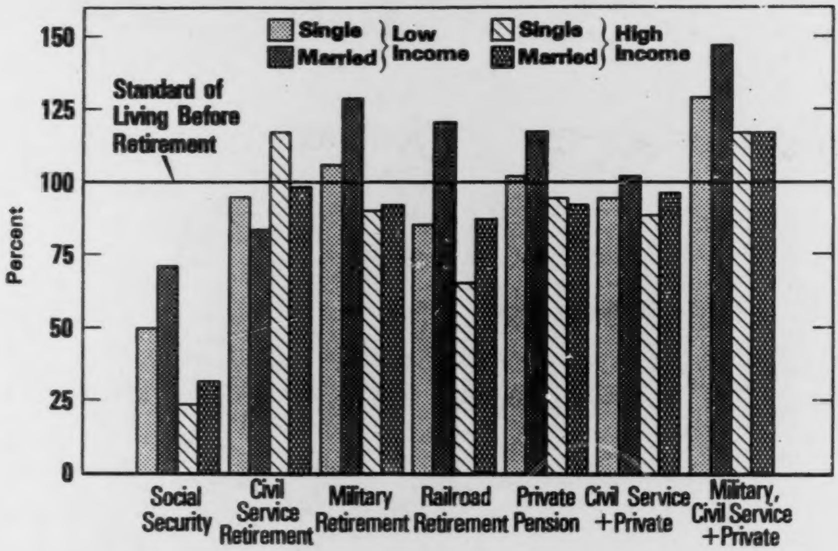
(1) Replacement Rates

A standard measure of the adequacy of retirement benefits compares initial benefits to the amount of income from wages or salary during the final year of work. There is no generally recognized standard for the replacement rate, although President Carter's Commission on Pension Policy recommended sufficient retirement income to enable one to continue the same income standard of living after retirement as before.

As shown in chart 6, replacement rates are substantially different for hypothetical workers with retirement benefits from different types of pension plans. These replacement rates in all cases are for workers retiring at age 65 with 40 years of work. They are shown for low-income workers ($16,300 upon retirement) and for high-income workers ($53,900 upon retirement) and indicate the difference between a single recipient as opposed to a married couple with one work history. Differences in tax treatment, income, and type of programs are taken into account. Any replacement rate reaching the 100-percent line indicates an income standard of living after retirement equal to the income level while still working.

CHART 6

AFTER TAX REPLACEMENT RATES FOR HYPOTHETICAL WORKERS



Source: Congressional Research Service.

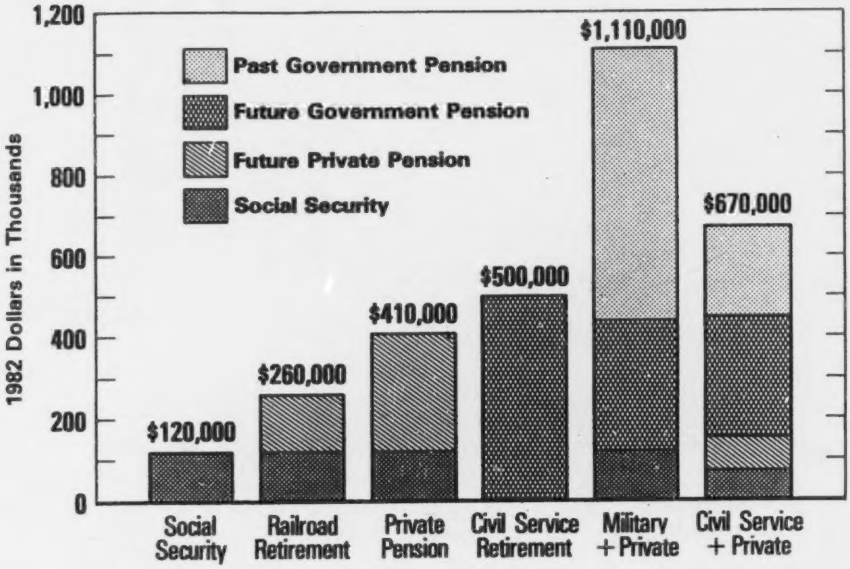
Except for social security by itself, most of these hypothetical work histories of 40 years, regardless of high or low income, of single or married status, or type of program benefits, will bring roughly as much after-tax income upon retirement as was available while still working. Social security alone falls short of this standard, particularly for high-income workers. Railroad retirement for high-income workers also falls somewhat short of meeting 100 percent of after-tax income. A combined career culminating in pensions from military retirement, civil service retirement, and social security appears most generous.

(2) Value of Benefits

Benefits from work-related entitlements constitute an expected stream of income that workers have "earned" through years of work. The value of this stream of income can be calculated and is shown for hypothetical workers age 65 with 40 years of work shown in chart 7. These are hypothetical workers with the same wage history (a final salary of $42,600—comparable to a mid-level Federal worker) and indicate a wide diversity of benefit value. The amounts represent the value of a stream of benefits available at age 65 together with the compounded value of benefits received prior to age 65 where applicable. Social security itself is relatively small, as are the railroad retirement benefits for a worker at this income level. Civil service by itself and the combinations of social security plus private pension plus social security all show about the same value of future benefit payments at age 65—a total value between approximately $400,000 and $500,000. However, for the military retirement, benefits have been received for 20 years, compounding to yield an amount which when combined with the future annuity amount is over $1 million. Early retirement benefits in civil service are added to future annuities in the same way, except that it would only be for 10 years. The combination of compounded payments to age 65 together with the present value of future benefits would total approximately $670,000 for civil service.

CHART 7

VALUE OF BENEFIT AT AGE 65



Source: Hay Associates.

OPTIONS FOR CHANGE

Work-related entitlement programs have been under close scrutiny in recent years, both because of their increasing share of the budget and because of recurring shortages in their trust funds. It is likely that this scrutiny will continue in future years for both reasons.

Financial problems in social security, medicare, and railroad retirement must be addressed because under current law benefit payments can only be made if their income from earmarked taxes is adequate, and they all face imminent trust fund shortages. As noted below, these shortages can be averted by increasing funds from outside the Government or by cutting benefits—both of which will reduce projected Federal budget deficits. To the extent funds are transferred within the Government, as would be the case if Federal employees were covered by social security, the trust fund is helped, but the overall Federal deficit is not affected.

Civil service retirement and military retirement face no trust fund shortages because military retirement has no fund at all and the civil service trust fund is becoming larger each year, primarily because of intragovernmental funding transfers. Benefit outlays are supported by the general fund (except for the amount, one-fifth of the total, coming from employee contributions). If benefit reductions were made in these programs, it would not be due to trust fund shortages, but rather to a congressional determination that they were too expensive compared to other priorities in the budget. Further cutbacks in these programs would most likely be motivated by the perceived need to reduce the size of the Federal budget and its deficit.

Options for correcting the financial imbalances in work-related entitlement programs are outlined below. While most proposals for change assume that the basic structure of the programs is sound and that any needed adjustments can be accomplished by reducing benefits or raising revenues, some recent proposals would substantially alter the basic structure of the programs.

(1) Basic Restructuring

Social security's financing problems of the past decade have generated proposals for "privatizing" the system. Workers under a certain age would be able to withdraw from the social security system and invest their contributions in an individual retirement account or similar financial instrument, which, it is argued, would yield greater return. While such a system would place more responsibility for retirement planning on individual workers and would allow workers to earn retirement benefits directly related to their individual contributions, it would also do away with the redistributive aspects of social security, and thus would repeal its social insurance features. It would put a tremendous burden on the current generation of workers who would have to prefund their own retirement benefits and continue to pay the unfunded benefits of existing retirees and workers above the age cutoff.

A year ago, the administration advanced a proposal to eliminate the current railroad retirement system. These retirees and workers would be put in the regular social security system and the private pension portion would be moved into the private sector, with the Federal Government having no further obligations for benefits under this part of the program. The proposal did not face the question of repayment for past work credits earned but not funded.

One proposal now being considered would cover new Federal workers by social security. This has been recommended by the Social Security Reform Commission as a measure to help resolve social security's financial problems. Since universal coverage is a principle of a social insurance system, proposals have been made from time to time to bring into social security the remaining workers not subject to mandatory enrollment: Federal workers, some State and local government workers, and some employees of nonprofit organizations. This action has been opposed by groups representing Federal retirees and employees as contrary to the maintenance of an appropriate Federal Government work force. These organizations also fear that social security coverage would reduce the political power of Federal workers and retirees, thus leading to threats of further benefit cuts.

Perhaps the most basic restructuring proposal to surface for the military retirement system is to end the 20-year retirement provision—a costly program feature. The military establishment has defended it as necessary to maintain a youthful and vigorous fighting force and to allow for military promotions.

(2) Reform Options Retaining Current Structure

Leaving aside basic restructuring, proposals to correct financial imbalance have concentrated on raising revenues or cutting benefits.

In social security, additional revenues could come from increasing the social security tax, bringing other types of taxes into the social security trust fund, or bringing in additional workers, such as Federal Government employees. For civil service retirement, where employee contributions pay one-fifth of benefit costs, and for military retirement, with no employee contributions, additional revenue could be raised by increasing the contributions from civil service employees, and requiring them for the first time for military retirement.

Benefit cuts can be made to have shortrun (up to 5 years) effects, or to alter costs in the long run. Proposals have been made for both. Changes designed to reduce shortrun costs will have to reduce benefits for those currently on the rolls. For this reason, the proposal most frequently mentioned reduces the cost-of-living adjustments. There are a variety of ways to do this, usually accompanied by the rationale that during the latter part of the 1970's, a flaw in the Consumer Price Index caused it to increase more than needed to keep retirees up with the cost of living. Price growth also outstripped wage growth in this period with the result that nonworkers maintained their standard of living while workers whose taxes paid for the retirement benefits suffered a decline in standard of living. Lowering the cost-of-living adjustment is usually thought to be the least objectionable way to cut benefits in the short run because recipients would not have their benefits reduced below what they had been accustomed to; they simply would not receive as large an increase. Reductions in the cost-of-living adjustment are sometimes portrayed as affecting recipients only one time, after which the benefits would be back to normal. However, under most such reductions, even a one-time reduction in cost-of-living adjustment would reduce benefits each year, for as long as the retiree continued to receive them. It would represent a permanent reduction in the base against which future increases would be made.

Longrun reductions usually are designed to affect benefits of current workers who have not yet retired and for whom retirement may be some years away. These include adjusting benefit formulas to make them less generous or extending the age at which retirement can begin. These changes can be phased in over long periods of time and can be designed to reduce program expenditures by substantial amounts. However, if such changes affect current workers and retirees, they devalue retirement credits which have been accrued—something which the Congress is legally empowered to do.

CONCLUSIONS

Despite their diverse histories, objectives, and means of financing, some general conclusions can be drawn from an analysis of the work-related entitlement programs as a group:

(1) Program funding for work-related entitlement programs is effectively pay-as-you-go despite the trust funds through which benefit payments are made for four of the five programs. Some trust funds are healthy and others are in crisis. Military retirement has no trust fund at all. Pay-as-you-go systems require the current generation of workers to pay the benefits for the retired generation, whether from payroll or general fund taxes.

(2) Work-related entitlement programs have grown rapidly since 1950—particularly since 1970. Total program expenditures grew fivefold, from under $50 billion in 1970 to $253 billion in 1983 due to additional persons coming on the rolls and due to program liberalizations made during the 1950's and 1960's, years of favorable economic and demographic outlook. Some liberalizations were made in the early 1970's before it was evident that rather anemic economic growth would characterize that decade (and this one so far). Full cost-of-living indexing for programs, continued salary growth, and increases in newly eligible beneficiaries are expected to result in additional program growth into the future.

(3) Benefits from civil service retirement and military retirement are substantially more costly than those from railroad retirement or most plans in the private sector that combine social security with a private pension. Nearly all funds to pay benefits in these two large Federal pension programs come from the general fund (100 percent for military retirement and 80 percent for civil service retirement). Military retirement costs 58.1 percent of payroll and civil service retirement, 36.1 percent. These are contrasted with 28.3 percent for railroad retirement and approximately 22 to 24 percent for a typical private sector plan that includes social security combined with a private pension. Most significant in explaining the larger cost are early retirement provisions and full cost-of-living indexation. By itself, social security costs 14.1 percent of payroll. This lower amount demonstrates social security's role as a basic income floor for most workers, upon which additional sources of retirement income can be built.

(4) Adequacy of work-related entitlement retirement benefits depends largely on a long and consistent attachment to the work force and on receiving benefits larger than provided by social security alone. If benefit adequacy is measured against income prior to retirement, work-related entitlement programs pay most retirees

amounts sufficient to maintain their standard of living in terms of income (taking into account difference of tax treatment) after they retire except for those receiving only social security. This is true for hypothetical workers at the low end of the income scale as well as near the high end. In fact, using this measure, and depending on the type of benefits, some retirees would see their after-tax incomes actually increase after retirement.

(5) If the value of a retirement benefit is thought of as an asset which provides an annuity for the remainder of one's life, these benefits would represent the largest asset in the balance sheet of most families. For persons with the same number of years of work and the same salary levels, these asset values range widely depending on the particular work. For a person age 65 who retires after 40 years of work with the final salary of $42,600, the value varies from $120,000 for social security by itself to $1,110,000 for a person who served 20 years in the military and then worked 20 years in private industry. Civil service retirement is one-half as much ($500,000 to $670,000), and the private pension/social security combination and railroad retirement are $410,000 and $260,000 respectively.

(6) Medicare, a work-related entitlement program, shares some financing features with the other programs included in this analysis, but it is a health insurance program, rather than a retirement income program. The hospital insurance part of medicare is financed through special payroll taxes paid into a trust fund and depends on these special taxes to meet payment obligations. Medicare costs have risen even more rapidly than the other work-related entitlements because they are tied directly to hospital costs which have gone up faster than the Consumer Price Index. If hospital costs continue increasing at their past rate, the medicare trust fund will incur vast funding shortages starting late in this decade or early in the 1990's.

(7) The nature of entitlement programs allows the Congress to change their eligibility and benefits as needed to meet specific policy or financing needs. Basic authorizing legislation, backed up by a consistent chronology of judicial rulings, differentiate these entitlement obligations from binding contracts that enforce vested pension rights in the private sector. The basic commitment of the Government to make payments is established in the eligibility requirements and benefit formulas in the authorizing legislation. This basic obligation exists, and can be changed, whether or not program financing functions through a trust fund. While the legal right of Congress to change the conditions of the entitlement is not questioned, benefit reductions have proved difficult to enact. Amounts payable under these entitlements follow from rights to benefits accrued over a lifetime of work. These accrued rights are independent of contributions made to support the program and their value is reduced retroactively when benefit amounts are reduced. Retirees and many current employees see such benefit re-

ductions as breaking a political understanding with their Government as well as a violation of their career expectations and retirement plans. Though legal sanctions are not available, political sanctions are.

Chapter II

An Overview

by

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Acknowledgment

Initial research and drafted materials used in preparing this chapter were provided by Duke Wilson of the Department of Health and Human Services. The paper benefited from research and editorial assistance of Pamela Espenshade. The many drafts of the paper were typed with patience and skill by Helen McKoy and Gail Tate.

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AN OVERVIEW

INTRODUCTION

Many policymakers, Government and business spokesmen from a wide political spectrum have concluded that the rate of growth in entitlement spending must be slowed if the Nation is to gain control over its budget expenditures and over the growing Federal deficit. Aside from their effect on the budget, internal financing problems have become acute for the two largest entitlement programs, social security and medicare, as well as for a smaller one, railroad retirement. All three face depletion of their rapidly shrinking trust funds.

The share of the Federal budget consumed by total Federal entitlement benefits has grown rapidly in recent years to almost 50 percent in 1982. Most entitlement benefits go to retired or disabled workers, to their dependents and survivors, and to the needy of the Nation through welfare programs. Eligibility for the largest entitlements follows from past work and earnings. Individuals become eligible for welfare entitlements if their financial resources are low.

This report analyzes a subset of entitlement programs, namely work-related entitlements. They are social security (old-age, survivors and disability insurance), medicare, civil service retirement, military retirement, and railroad retirement. Collectively, these programs will spend $253 billion in 1983, more than one-third of the Federal budget and about 8 percent of GNP. Nearly 41 million benefit payments will be made each month.

This study of work-related entitlement programs consists of a summary and conclusions, an overview, chapters on each of the five programs, and appendixes. The individual program chapters provide extensive description and analysis of program history, background, and objectives. The study analyzes financing techniques, sources of funds, and shortrun and longrun financing problems. Each chapter ends by analyzing selected options for correcting financial imbalances in the programs, due either to trust fund shortages or longrun structural problems.

This overview establishes a framework for considering financing issues of work-related entitlements by comparing their financing techniques and operations. Such a comparison, expanded to include private sector programs when appropriate, provides a background for dealing with problems of individual programs.

The overview uses common sets of economic and demographic assumptions (described in detail on pp. 51–53 below) to project costs and analyze financing of the five programs. It finds that over the next 10 years, using midrange consensus assumptions (so-called intermediate II–B) of the Social Security Administration, benefits paid out by the programs will more than double to $546 billion. Under more pessimistic assumptions, total expenditures could reach $690 billion, 174 percent higher in 1992 than in 1983.

The study also finds wide divergence in overall longrun costs of work-related entitlements when measured against total payroll costs on those programs. It reports that over the next 75 years social security benefits and railroad retirement benefits are expected to equal about 14 percent of their respective payrolls, but civil service and military retirement benefits are expected to equal 36 and 55 percent, respectively. It attributes the higher cost of civil service retirement and military retirement largely to early retirement privileges and to full inflation protection.

This overview is divided into six sections:

First, it briefly introduces the chapter.

Second, it gives background information on program size, growth, and historical development.

Third, it examines the financing issues for work-related entitlements, discussing the contexts in which these issues most frequently arise—the purposes of and shortages in the trust funds, and their effect on budget deficit.

Fourth, using both optimistic and pessimistic economic and demographic assumptions, it analyzes actuarial projections, indicating a range of future costs and trust fund solvency. Including both longrun and shortrun projections, and emphasizing the overriding importance of economic and demographic conditions in determining future costs, this actuarial analysis shows further expansion and continuing upward pressure on program expenditures.

Fifth, it briefly examines benefits paid by the different programs and considers selected issues of equity and adequacy.

Sixth, it concludes by discussing the technical feasibility but political difficulty of changing program structure and financing. A major conclusion is that the five programs by necessity use pay-as-you-go financing. This conclusion is important as background for the extensive discussion of options for improving program financing presented in the individual program chapters.

BACKGROUND AND HISTORY

The air of urgency surrounding the financing of work-related entitlement programs is a relatively new development. In the past, the support of policymakers for entitlement programs was based on unprecedented prosperity following World War II. Favorable demographic conditions combined with steady improvements in real wages and overall productivity gains cushioned the impact of early cost increases in work-related entitlement programs. These favorable economic and demographic conditions generated support for entitlement programs among policymakers, taxpayers, and beneficiaries.

Growth of entitlement programs, then, was incremental and cumulative. They grew in size and scope more as a result of laws that added to or amended previous policies than because of sweeping changes in ongoing practices. Medicare, the health care financing programs for the elderly and disabled, enacted in 1965, is an exception to this generalization. Over time these entitlements came to represent a central commitment by the Government to the people: entitlements to future social insurance and public pension benefits are now among the largest and most important assets of most American families. Actual benefits already paid have played a major role in preventing poverty among those no longer expected to work.

Eligibility for entitlements and the size of benefits are established by legislation authorizing the program. Upon enactment, the Federal Government is obligated to pay benefits to all eligible persons. The statutory rules which determine expenditure levels remain largely outside the appropriations process. The amounts in the Federal budget each year constitute only an estimate of what will be required to meet the legislated obligation. Some entitlement programs appropriate funds automatically and permanently. For others with annual appropriations, if actual spending turns out to be more than the estimated amount, the Congress must either change the entitlement or come up with the additional funds. To change expenditure levels Congress must change eligibility rules and benefit formulas by revising the authorizing law. But as long as Congress chooses not to change eligibility and benefits, these entitlements constitute a binding obligation on the government. In case the law is not complied with, eligible individuals and governmental units have legal recourse against the Government. Legal analysis (see appendix C) clearly finds that Congress has the authority to change program obligations as long as it does so through the authorizing statute. Thus, entitlement to future benefits does not constitute an unabridgable legal contract right.

As shown in table 1, entitlement programs account for nearly half (47 percent) the Federal budget. According to current services projections based on policies assumed by the Congress in its first budget resolution for 1983, entitlement programs overall maintain their share of the budget throughout the period 1980–85. While their percentage increase is not as rapid as that projected for defense spending and interest on the public debt, entitlement spending increases more than defense in absolute (current) dollars. According to CBO, if policies adopted by the Congress in its first budget resolution for 1983 had been effected, Congress would authorize and appropriate a 1985 defense budget $138 billion larger than the 1980 budget. During the same period, spending on entitlement programs would go up automatically by $158 million without authorizing action by Congress, and $133 billion of this increase would be for work-related entitlements.

Table 1.—ENTITLEMENT PROGRAMS AND SIZE AND GROWTH IN THEIR SHARE OF THE FEDERAL BUDGET

[Dollars in billions]

	1980	Percent	1985	Percent	Percent change 1980–85
Entitlement:					
Work-related	$182	32	$315	35	73
Other	87	15	112	12	29
Defense	124	22	262	29	111
Interest on the public debt	52	9	118	13	127
Other	131	23	103	11	−21
Total	576	100	910	100	58

Source: Congressional Budget Office. Based on projections made as part of CBO's September 1982 budget update. These estimates are based on the CBO's economic outlook at that time, and on the policies adopted by the Congress in the first budget resolution for 1983.

Eligibility for work-related entitlement benefits begins after work ends, and except for medicare, benefit amounts are derived from the number of years and amount of earnings over an entire work history. Work-related entitlements are distinguished from other entitlements whose eligibility requires a demonstrated need (e.g., supplementary security income) or is based on an allocation formula (e.g., some grants to States).

Total outlays from the five work-related entitlement programs will be $253 billion in fiscal year 1983—about one-third of the budget.[1] The social security cash benefit program (old-age, survivors, and disability insurance—OASDI) is by far the largest of the programs, 83 percent of the total, but medicare has grown even more rapidly since its enactment in 1965. These two larger programs constitute the basis of the Nation's social insurance system. Together they dominate the budget, spending 28 percent of total Federal outlays.

The other three programs are staff retirement programs even though they have acquired some social insurance features over the years. As discussed below, these pension programs share basic pension features with social security. These Federal staff pension programs also have similarities with but also basic differences from, their cousins, private pension plans.

Civil service retirement and military retirement are the oldest of the work-related entitlements and are roughly the same size in terms of recipients (about 2 million for the civil service retirement system and 1½ million for military retirement), and annual dollars spent ($21 billion and $16 billion respectively, in fiscal year 1983). Railroad retirement, the smallest of the five programs (1 million beneficiaries and $5.4 billion of benefit payments), is the only private industry pension authorized in Federal law and controlled by the Federal Government.

Work-related entitlement programs have grown to their present levels from much smaller amounts in 1950. At that time, recipients totaled 4.2 million, while expenditures were $1.83 billion, or 4.3 percent of the total budget. (See table 2.)

---

[1] Estimates in this report for 1983 and subsequent years are actuarial projections and will differ somewhat from official budget estimates submitted as part of the 1984 budget. They were made during the fall of 1982 by actuaries of the five work-related entitlement programs using two sets of economic and demographic assumptions developed by the Board of Trustees of the social security system for its 1982 report. To insure completeness and consistency, needed modifications in the data were made by Hay Associates. See the appendix to this overview, p. 92, for a discussion of actuarial concepts and procedures used in this study.

Table 2.—SIZE AND GROWTH OF WORK-RELATED ENTITLEMENTS

[Recipients in millions and dollars in billions]

	Recipients									
	1950		1960		1970		1980		1983	
	Number	Amount	Number	Amount	Number	Amount	Number	Account	Number	Amount
Social security	3.48	$1.0	14.84	$11.5	26.23	$32.5	35.62	$122.1	36.19	$169.4
Medicare						5.3		25.6		39.5
Civil service retirement	.19	.2	.54	.8	1.01	2.8	1.68	15.0	2.01	21.8
Military retirement	.13	.3	.26	.7	.76	2.8	1.26	11.9	1.45	16.3
Railroad retirement	.40	.3	.81	.9	.98	1.8	1.02	4.9	.98	5.4
Total (some overlap)	4.20	1.8	16.45	13.9	28.98	45.2	39.58	179.5	40.63	252.4

Source: Social Security Administration, Office of the Actuary, Defense Manpower Data Center, and Hay Associates. The number of medicare recipients is not listed separately since all would be receiving social security. Furthermore, some individuals are receiving two or more benefits.

These five programs make up the bulk of Federal support to the elderly even though a substantial share of the benefits go to people who are not classified as elderly. These spending programs also constitute the basic but not the only Federal contribution to the Nation's retirement income system. Federal Government policies also affect retirement income decisions through regulation of private pensions and through favorable income tax treatment of such private pensions and savings accounts as individual retirement accounts (IRA).

Medicare,[2] a program of hospital and medical insurance for the elderly and disabled, is included in this analysis because its eligibility depends on previous work history and because it is an integral part of the Nation's social insurance system. Second only to the social security cash assistance program, its size and rapid growth have aroused recent congressional concern, particularly since this growth is projected to continue. If it continues at past rates, the program will face vast funding shortages by the end of this decade.

Medicare, a health insurance program, differs from the other four programs because they make cash benefit payments and they share common pension features. Medicare will not be discussed at length in this overview which compares and contrasts the four cash-assistance programs which share pension features.

The four cash programs pay benefits not only upon retirement, but also in case of disability. Although the shortrun and longrun costs of these disability provisions are included in the program totals, there is no discussion of the operations and programmatic issues of the disability programs. (Appendix D describes the provisions and size of these disability programs.)

Except for medicare, enacted in 1965, the work-related entitlement programs predated the Great Society. Military retirement and civil service retirement were born in the latter part of the last century and the early years of this one. Social security and railroad retirement were offsprings of the Great Depression.

Although program origins reach well into the past—50 to 100 years ago—many current program features which generate expanding costs were set in motion more recently—in the 1950's, 1960's, and early 1970's, years of favorable economic and demographic conditions. Entitlement commitments that seemed affordable at the time generated the present expenditure levels.

These favorable conditions no longer prevail. An ever increasing number of people became eligible for benefits as birth rates declined thereby increasing the expected ratio of beneficiaries to workers. In the 1970's, and early 1980's, prosperity gave way to intermittent declines in real wages and to high unemployment. Past commitments continue the pressure for program growth far into the future. The future retirement of the large baby boom generation is now expected to be a longrun threat to the financial soundness of the social insurance entitlement programs. Because of these changes, a new climate in which concerns about trust fund shortages and climbing costs (and taxpayer willingness to pay them) now dominates policy debates.

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[2] When medicare is discussed in this overview, it will refer only to the hospital insurance (HI) part of medicare. Chapter IV presents a comprehensive review of medicare's overall financing issues, including both HI and supplementary medical insurance (SMI).

(A) Program Evolution

Work-related entitlement programs are products of the democratic political processes that prevail in the United States, evolving at different times and for different reasons during the past 120 years, and responding to national social, economic, and demographic forces. Commercial enterprises and industrial organizations have always faced the problem of old or disabled employees. Before the development of modern corporations, formal methods for solving this problem did not exist. In fact, attempts at solution were likely to be only informal arrangements for continuing a portion of salary to faithful but infirm employees. Businesses were controlled by relatively few individuals, so that even when the prosperous employers did establish regular support for aged or disabled workers, they could not assure continued payments. Legacies were uncommon, endowments practically unheard of. Thus, arrangements to support elderly and disabled workers were gratuities—benefits backed up by neither permanent institutions nor assets to which former employees had legal rights. Instead, old age (or disability) income protection was either the responsibility of the individual employees or their families, or were voluntary gifts deriving from the benevolence and prosperity of employers.

Industrialization, with its steady migration to cities, intensified problems of old age and disability. Not only were there fewer employment opportunities for the elderly and disabled in the city, but urban living fragmented the extended family structure upon which previous generations had depended for support. The anonymity of city life diminished the identity of individuals, and with it the basis for much of the kindness benevolent businessmen had bestowed upon their aged employees.

Yet, twin developments of urbanization and industrialization also alleviated some of these problems. Opportunities for enterprise were boundless, and although opportunities for failure also abounded, the unpredictability of individually owned businesses was gradually supplanted by the financial and organizational advantages of the corporate structure. A large pool of available workers, combined with superior methods of using resources, created a trend toward business organizations of great size and perpetuity.

As corporations increased, the need to organize labor resources combined with a humanitarian concern for aged and disabled employees. The practice of assigning light work to these individuals gave way to informal, charitable plans granted by management to specific individuals. Eventually these led to standardization of age, service, and pension amounts as corporations with superior retirement policies began to gain advantage in the competition for skilled workers.

Workers on farms would have counted as friends persons with whom familiarity was a natural result of geographic proximity, but upon moving to the city, workers began to identify common interests with others engaged in the same work. At the same time, corporations were examining formal retirement procedures as a personnel tool, and nascent labor associations were pressing for seniority rules aimed at preventing the arbitrary dismissals of older workers with long service.

Workers who shared common fears about unsafe working conditions began to assume a common responsibility for the victims of misfortune and their dependents. In a tradition reaching back to 18th century European guilds, workers expanded the practice of collections in behalf of widows or disabled colleagues by establishing relief societies and special group insurance schemes. In fact, early worker associations in the railroads, the first of the "big businesses," counted insurance and benevolent associations one of their primary reasons for existence.

As industrialization began to weaken the links between the abundance of land and individual economic security, it created greater problems for the aged and disabled, who were no longer as likely to be given the simple, but necessary tasks that on farms were associated with diminished physical capacity. In time, rational retirement provisions replaced the irregular procedures for removing workers whose pay exceeded the value of their services. An orderly method of retirement had competitive as well as human advantages: it attracted and retained skilled workers. A stable work force helped breed familiarity and the shared interests out of which labor organizations were born. Early labor associations, then, promoted not only insurance and benevolent activities but also seniority rules and the improvement of working conditions.

Since their inception in the mid-19th century, pensions for private employers, as well as military and civil servants, had two purposes: (1) to meet employers' needs for recruiting and maintaining an efficient work force, and (2) to meet income support needs of the elderly and disabled brought about by increasing industralization and urbanization.

From the Nation's earliest wars, Government benefits have supported veterans, but it was not until the 1860's that a system resembling the present-day military retirement system began. At first, military retirement benefits were designed not only to reward military fighters for service to their country, but to maintain a "youthful and vigorous" fighting force, objectives still in force. Private pensions began about 1875, mainly as a way to deal with inefficiencies caused by superannuated employees who were obliged to keep working after their productive years had passed because they had no other means of support. Such superannuated employees were seen as a problem for the civil service soon after its beginning in 1883. After continuous efforts extending over 30 years, Congress enacted the civil service retirement system in 1920, with its principal objective to humanely remove superannuated employees from the work force.

The railroad industry is credited with originating private company pension plans in America. As early as 1874, railroads began to replace the relief associations of the previous decade with formal pensions. The reasons usually cited are (1) the competitive advantages of a stable skilled work force which, in part, was recruited and retained by the promise of retirement provisions; (2) the great size of railroad enterprises which made rational provision for old and infirm workers necessary and practical; (3) the larger proportion of aging workers caused by maturation of the industry; and (4) high accident rates, which caused private insurance companies to be unable or unwilling to grant insurance to individual workers. The relief associations themselves evolved from ad hoc collections in behalf of widows and disabled employees that received their contributions from employees, rail companies, and the railroad public.

The railroad retirement system started during the Great Depression, and by this time the need for a social insurance system had been accepted and made explicit through the plight of millions of destitute elderly and unemployed. In fact, the railroads became the only industry with a federally controlled industry pension system. A Federal pension for railroads seemed to follow naturally from longtime Federal involvement with the industry. Its members were exempted from coverage by social security, adopted about the same time.

Social insurance in the United States lagged behind other industralized nations; Germany had begun its social security system in 1889. In the early decades of the 20th century, the movement for social insurance gathered momentum in the United States because of lack of income security in old age, death, and disability. This culminated during the depression with the Social Security Act of 1935. The Social Security Act, as originally passed, would have paid benefits only to elderly workers. But in 1939, before the first benefits were actually paid, the act was changed to include benefits for spouses and survivors. Disability insurance (DI) was added in 1956, and medical insurance under medicare in 1965.

Although late on the scene, social insurance programs have grown so rapidly that they now loom as the largest category in the Federal budget.

(B) Determining Eligibility and Benefit Amount

Costs of work-related entitlement programs are determined by the number of recipients and the amount of benefits.

Eligibility in all programs follows from a combination of years worked before reaching a certain age. Table 3 shows the minimum years needed to establish eligibility. (Usually, a full career worker would accrue many times the number of years shown here.) In most pension and social insurance programs, benefits are not payable until a certain age is reached, even though eligibility for benefits comes with the number of years indicated. The longer the work history, the higher the benefit amount. Programs vary markedly both in age and years of work required. Subsequent discussion will show the two programs permitting earliest retirement with unreduced benefits (civil service retirement and military retirement) to be more costly than the other programs. Early retirement requires payment of benefits over a much longer period of time. If benefits are paid with 20 years of service, as in military retirement, and at age 55 for civil service retirement, total benefits can be 50 to 100 percent higher than if payments did not start until age 65.

Table 3.—MINIMUM YEARS OF WORK AND AGES TO ESTABLISH ENTITLEMENT ELIGIBILITY

	Minimum years of work	Ages for unreduced benefit
Social security	10	65
Medicare (hospital insurance)	10	65
Civil service retirement	5	[1] 55
Military retirement	20	([2])
Railroad retirement	10	[1] 60
Private pension	5 or 10	62 or 65

[1] With 30 years.
[2] Any age.

After eligibility is established through the right combination of work years and age, a means must be established to determine the amount of benefits. The two basic types of pension plans—defined contribution and defined benefit plans—establish benefits differently. In the defined contribution plan, the amount of the benefit depends on the amount of funds contributed and invested and the interest earned during the working years. There is no commitment to pay a predetermined amount. Defined benefit plans, on the other hand, feature a formula that determines the benefit amount. This formula depends on neither money set aside nor on interest earned. Instead, it is a function of the number of years worked and income earned, either over the work life or some shorter period near the end of the work career when earnings typically are highest. Work-related entitlement programs are all defined benefit plans.

By using social security and civil service retirement as examples, table 4 demonstrates the important principles of defined benefit plans. Examples assume a work career of 40 years with retirement at age 65. They also assume a final salary of $20,000, lower than the average for civil service and higher than the average for social security recipients.

Table 4.—BENEFIT FORMULAS FOR CIVIL SERVICE RETIREMENT AND SOCIAL SECURITY

Civil Service Retirement; Average of 3 High Years = $20,000

1.5 % × 5 Years × $20,000 = $ 1,500
1.75% × 5 Years × $20,000 = 1,750
2.0 % × 30 Years × $20,000 = 12,000
Total Pension = $15,250 Per Year (Taxable)

Wage Replacement: $\frac{\$15,250}{\$20,000} = .76$

Benefit Formula for Social Security; Calculated from Average Indexed Monthly Earnings (AIME); e.g., AIME = $1,667 or $20,000 Per Year

90% × $ 254 = $229
32% × $1,274 = $408
15% × $ 139 = $ 21
Total = $658 Per Month = $ 7,896 Per Year (non taxable)
With Spouse = $11,844 (non taxable)

Wage Replacement: $\frac{\$ 7,896}{\$20,000} = .39$

With Spouse $\frac{\$11,844}{\$20,000} = .59$

Defined benefit plans devise different ways to base the initial pension benefit on a figure that takes into account productivity and price increases realized during the working life. In civil service, this is accomplished by basing the initial benefit on the average of the highest 3 consecutive years of salary, usually the last three. Social security takes the stream of entire lifetime earnings and adjusts each year by the growth in average wages, which is approximately equivalent to basing a benefit on high 5 years of salary.

As noted in the table, credits earned in the later years of civil service are given greater weight than those earned in the earlier years. Called a "back-loaded" plan, its result is to provide an incentive for employees to remain in Government service if they stay in for 10 years or more. In the social security formula, lower amounts of income earn a greater return on contributions than do higher incomes. Called the "tilt" in the social security formula, it is designed to meet social security's social adequacy functions by returning more benefits to low income than to high income beneficiaries.

In the examples presented in the table, the ratio of pension received to earnings during working years, a common indicator of pension adequacy, is 0.76 for civil service and a lower 0.39 for a single social security beneficiary. This means that 76 percent and 39 percent of preretirement earnings are replaced by a pension for civil service and social security respectively. This goes up to 0.59 (or 59 percent) for a couple because social security provides additional benefits for a dependent spouse.

One problem of comparing benefit adequacy among different programs is that tax treatment of benefits is not consistent. In this example, the higher civil service pension is taxable (after the employee's contributions have been paid back) while social security is not.

FINANCING ISSUES

Work-related entitlement programs share one feature: they all are Federal Government obligations. Benefits are paid by the Federal Government and payments require revenues coming into the Government from taxes and sale of bonds to the public. In discussions of the financing issues in work-related entitlements, it is not always clear whether the problem is one of shortages in the trust funds or the burden of benefit outlays on the Federal budget. In the final analysis, though, work-related entitlement program obligations are backed by the taxing power of the Government. This principle holds true whether programs are "self-financed" with revenues coming from special payroll taxes such as social security and medicare, or whether most of the revenues come from general income taxes as is true for civil service retirement and military retirement.

Financing issues will be discussed first from the perspective of the shortages in trust funds and then from the perspective of the effect of program benefit expenditures on overall budget outlays.

(A) The Financial Devices: Trust Funds and the General Fund

(1) OPERATION AND EFFECTS OF TRUST FUNDS

A trust fund is an account set up in the Department of the Treasury to collect taxes and other receipts for specified purposes in accordance with the law. A trust fund also serves as a disbursing mechanism for benefit payments. In fiscal year 1983, outlays from all Federal trust funds were estimated to be $281 billion, of which the work-related entitlement trust funds constituted nearly 90 percent.

Two trust funds handle financial transactions for the social security cash benefits program (OASI and DI) and two for medicare (the hospital insurance (HI) and supplementary medical insurance (SMI)). At present, payments for the OASDI and HI programs come almost exclusively from special payroll taxes paid into the trust funds. The SMI program is financed from general revenues (three-fourths) and recipient contributions (one-fourth). The trust fund for civil service retirement, with the largest trust fund balance in dollar size receives most of its assets as intragovernmental transfers from the general funds. Employee contributions account for one-fifth of the total contributions.

Trust fund assets for work-related entitlements consist of the Federal Government's own securities. In effect, the Federal Government writes itself an I O U, although from one perspective it is possible to view these trust fund assets as resulting from a loan to the Treasury to the extent earmarked payroll taxes and contributions were responsible for the trust fund buildup. The existence of a trust fund does not insure that benefits will always be paid. As long as trust funds are invested in Government securities the only real assurance is the governmental commitment to meet benefit payments by raising revenues through taxes or selling bonds to the public. The nature of this commitment is little changed by the existence or absence of a trust fund. Having a trust fund available to pay benefits when program outgo exceeds income does not alter the effect on Government fiscal operations. The relationship between revenues of the Government accounts from taxes and sales of bonds to the public and Government payments to the public affects taxpayers, receipts, consumers, and businesses. Trust fund operations by themselves need have no economic effects.

An example, shown in table 5, will illustrate this point. Assume for a given year that general revenues into the Government were $100 and expenditures from the general fund were $110. Assume further that trust fund revenues were $40, expenditures from the trust fund were $50, and that there is a trust fund with Government securities of $200. Redemption of these securities (I O U's from the government to the government) would not raise any money for the program. In order to finance its operations, the Government must raise $10 in taxes or sell bonds to the public for $10, just as it must to make up the $10 deficit in the general fund. A current-year deficit, produced by either trust fund transactions or a general fund account, can be made up only by raising taxes or selling additional bonds to the public. In this example, the trust fund has grown to $210 by the end of the year even though it had a deficit of $10 because interest of $20 on the trust fund assets was credited to the trust fund. Interest paid on these Government I O U's have no effect on outlays of the budget deficit.

Table 5.—ILLUSTRATION OF GOVERNMENT FISCAL OPERATIONS AND TRUST FUND

	Revenues to the Government	Government outlays	Deficit or surplus
General revenues	$100	$110	−$10
Trust fund	40	50	−10
Total	140	160	−20
Trust fund operations, beginning year		200	
Income from outside revenues		40	
Interest on assets		20	
Total income		60	
Payment to outside sources (outlays)		50	
Increase in fund		10	
Fund at yearend		210	

All Federal pension and social insurance programs with trust funds invest only in Government securities. Since these are simply obligations the Government owes itself, all of these programs become de facto pay-as-you-go, regardless of the size of the trust fund. Prefunding these programs in the sense that private pensions are prefunded is not possible unless the trust funds were taken off-budget and invested in securities outside the Government itself, which would give rise to another set of problems. Contrasting the three largest pension programs (social security, civil service retirement, and military retirement) will illustrate.

Since the military retirement system has no trust fund at all and employees make no contributions, all expenditures are made from general funds. On the other hand, social security expenditures can be made only from its trust fund, which receives nearly all of its funds from an outside source of revenue—the payroll tax.

The relationship between overall Government expenditures and revenues, not the existence of a small or large trust fund, has an effect on the economy. Only the escalation or decline in the social security trust fund makes a difference because most funds come into the trust fund from taxes paid by employees and employers--sources of revenue to the Government. To build up the trust fund, more funds come from payroll taxes than go out in benefit payments. Whenever this happens, other taxes will be lower or the Federal deficit will shrink. Regardless of the size of the trust fund, if the amount of payroll tax revenues is smaller than benefit payments, other taxes will have to be raised or the Federal deficit will increase.

The civil service retirement trust fund receives only one-fifth of its contributions from outside the Government. This trust fund is growing and will continue to grow into the future according to projections. However, this growth has no effect on Federal Government revenues or expenditures. As noted, revenues from outside the Government only through employee contributions (7 percent of salary), estimated at $4.7 billion in fiscal year 1983, are a fifth of the benefit payments of $21.8 billion. The remainder will come from general funds, in effect increasing the Federal deficit by $17.1 billion.

The civil service retirement trust fund continues growing because funds are credited to it which do not come from outside the Government. These amounts are internal Government transactions, with the Federal Government, in effect, writing itself an I O U. As long as benefits exceed employee contributions, the Federal deficit will increase, requiring increased taxes or the sale of bonds to the public.

In the three programs discussed in the previous paragraphs, the Federal Government is obligated to meet benefit payments prescribed in the program's authorizing legislation. These benefit entitlements constitute the Government's commitment to pay benefits. The commitment is just as strong in military retirement, which has no trust fund, as it is for the growing civil service retirement trust fund, or, as it is for social security with a small and shrinking trust fund. *Whether a program has a trust fund or not and whether a trust fund is large or small has no effect on Government outlays or the budget deficit now or in the future.*

(2) TRUST FUND SHORTAGES

Trust funds are set up to be a financing mechanism out of which payments must be made. Not only do the operations of the trust funds differ from program to program, but the extent of trust fund shortages differs as well. These shortages require corrective action by the Congress.

The *social security* trust fund is almost depleted. Payments for social security's retirement program can be made now only because the Congress authorized borrowing from the temporarily-better-off medicare trust fund. This borrowing authority allowed only enough borrowing to pay full benefits through June 1983.

The *railroad retirement* trust fund also faces depletion and may be unable to meet currently scheduled benefit payments by April 1984. Legislation enacted in 1981, however, requires the Railroad Retirement Board to reduce benefit payments if it is to run out of funds. To avoid trust fund insolvency, such benefit-cutting provisions might have to go into effect in October 1983.

Even with optimistic economic assumptions, *medicare* will enter into serious trust fund shortages by the end of the decade. This crisis may come sooner if funds now being loaned to social security are not repaid, and if medicare spending itself climbs higher than expected.

As already noted, *civil service retirement* has no trust fund shortage, with none expected. Under the current system, trust fund balances will continue to mount in the future. If social security coverage were extended to new Federal workers and a separate trust fund were maintained for current employees and retirees, financing arrangements for that trust fund would have to be adjusted.

And, of course, the *military retirement* system has no trust fund crisis because it has no trust fund.

(B) Program Growth: Pressure on the Budget

Benefit payments from all work-related entitlement programs count as outlays in the unified Federal budget. Their large size and rapid and relatively uncontrollable growth have targeted them for particular concern in the context of the unprecedented deficits projected over the next few years. Policymakers and commentators from Government and private business, representing a wide political spectrum, have called for "curbing the rate of growth of entitlement spending" as necessary to gain control over Federal budget deficits.

Current and projected levels of spending were brought about by specific benefit liberalizations made over the past 30 years, by additional increases in real benefit levels due to growth in wage levels, by expansion of the eligible population, and by the addition of new programs, medicare being the most significant. These trends for higher benefit outlays, which are expected to continue, resulted from four causes: (1) the programs began "maturing," (2) additional programs were added during the 1950's and 1960's when favorable economic growth and demographic conditions led to optimistic longrun financing forecasts, (3) benefit levels of all programs were increased during the 1950's, 1960's, and early 1970's, (4) people live longer than had been projected when the programs were created or liberalized.

(1) MATURING PROGRAMS

Programs whose eligibility and benefits follow from age and years of work have long startup periods, since entitlement to program eligibility and benefits builds up slowly. Financing a pay-as-you-go system is easy in the early years because all workers can be taxed, but benefits go to a few recipients at first. In 1950, benefit payments for work-related entitlement totaled $1.83 billion, awarded to 4.2 million recipients. Social security was still in its infancy, having made payments for only 10 years. Civil service retirement and military retirement, while much older, had relatively small work forces in the early years, and thus a small number on retirement rolls by 1950. The number of employees rose dramatically during the Great Depression and even more during World War II. This rapid influx of potential beneficiaries were working and accruing retirement credits during this time. By 1950, only 190,000 recipients of civil service retirement benefits and 130,000 military retirement recipients were on the retirement rolls. Railroad retirement, with an earlier employee buildup, had 400,000.

By the late 1970's and early 1980's, however, the situation had changed. The programs were "maturing," meaning that the relationship between retirees and employees was approaching its high point. If employment continues level after the high point is reached, the ratio will remain constant. Civil service retirement and military retirement will mature earlier than social security. Railroad retirement is already past the point of maturity. Social security will not fully mature until the baby boom generation retires in the next century. Continued growth in social security costs stems from continued growth in the number of beneficiaries on the rolls which, at the end of the next 10 years, will be 6 million more than today.

(2) NEW PROGRAM BENEFITS

During the 1950's and 1960's, new benefits were added to improve the coverage and protection of work-related entitlements. Easily financed at the time, they have become very costly as programs matured. Since rapid economic growth characterized these two decades, the new features seemed easily affordable.

Disability insurance was added to social security in 1956, and the medicare program began in 1965. Eligibility for benefits at earlier ages was allowed in social security, railroad retirement, and civil service. Total social security costs did not go up because of this feature, but because benefits were actuarially reduced for early retirement. Civil service and railroad retirement did not reduce benefits for early retirement, thus adding substantially to future program costs.

(3) INCREASED BENEFIT LEVELS

During the 1950's, 1960's, and even into the early years of the 1970's, benefit levels were increased. All of these changes were legislated in the sense that they followed from provisions in the authorizing statute. For some changes, however, the Congress legislated a specific benefit increase for beneficiaries already on the rolls. These were simply ad hoc benefit increases enacted from time to time to keep pace with inflation and to enable recipients to participate in the general rise in the national standard of living. The cost effects of such changes were immediate and long run. Since it expands the base upon which all future increases are made, a one-time increase for beneficiaries adds to program costs for as long as the group receiving such a benefit increase is on the rolls. All ad hoc social security benefit increases, however, were both for current beneficiaries and for all future beneficiaries as well. Congress also made the civil service benefit formula more generous by calculating benefits on the average of the high 3, instead of high 5, years of salary.

Other changes following from the nature of work-related programs increased benefits automatically. Congress did not have to take explicit action to cause the growth. All programs tie initial program benefits to a measure of final average earnings, which in turn reflects the wage growth due to productivity increases. Thus, initial benefit levels, and therefore all subsequent benefit levels, rise automatically with economic growth.

Toward the end of this period, one of the more costly changes was made. Program benefits of all programs were indexed to increase automatically with increases in the cost of living. All the programs, beginning with military retirement and civil service retirement in 1963 and culminating with social security in 1972, now adjust benefits automatically for inflation. Promising full cost of living adjustments is a very costly feature in a pension plan. Only the Federal Government commits itself to full cost of living protection in its pension and social insurance programs. No private plan can afford to do this.

(4) INCREASED LIFE EXPECTANCY

The decrease in mortality rates has been slow but steady, adding to program costs. The longer people live, the higher the total payments, since payments continue until death. In 1983, males reaching age 65, on average, can expect to live 14.5 more years, 1.7 years longer than in 1950. For females, the difference is even greater. A woman whose 65th birthday falls in 1983, on average, can expect to live 18.9 years longer—3.8 years more than her 1950 counterpart.

ESTIMATING FUTURE LONGRUN AND SHORTRUN COSTS [3]

Projecting into the distant future is necessary but hazardous. Estimating future social insurance and pension program costs has the added difficulty of an extremely longrun future: actuaries typically make estimates for 75 years or longer. The long range is necessary to planning for current and future workers and to identifying when a retirement program will level off.

(A) Economic and Demographic Assumptions

The size and growth of work-related entitlements is inherently sensitive to assumed economic and demographic conditions. Data presented here show projected costs for work-related entitlements, for the short and the long run. These data were prepared by actuaries of the five agencies charged with making official valuations of the social insurance and pension systems under consideration. The Congressional Research Service requested these actuaries to calculate the cost of their systems by using a common set of economic and demographic assumptions so that cost analyses of the different systems would be comparable. For purposes of this study, actuaries for civil service retirement, military retirement, and railroad retirement were asked to use two sets of economic and demographic assumptions calculated by the board of trustees of the social security system rather than by their own. These are the assumptions used in estimating costs of social security and medicare. These social security assumptions are not more authoritative than assumptions used to value the other systems. However, social security's assumptions are well-known and widely used and became the common base upon which comparison projections were made.

Future costs and financing of social security are calculated by using four sets of economic and demographic assumptions. These are designated with Roman numerals, I, II-A, II-B, and III. Assumptions I are optmistic; II-A and II-B are considered an intermediate or most likely set and III a more pessimistic set. Recent economic developments point to the likelihood that the II-B assumptions, considered the most likely last year, may be too optimistic for the short run, and that assumptions closer to III may be more appropriate. For example, the National Commission on Social Security Reform agreed on set II-B as most appropriate for its long-term analysis, but used assumptions closer to III for the Commission's short-term analysis, extending through 1989. Cost projections shown and analyzed here for all work-related entitlements use assumptions II-B and III, suggesting a possible range of costs.

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[3] See the appendix to this overview, p. 92, for a discussion of actuarial concepts and techniques.

Economic conditions are highlighted because of their dominant influence in shortrun costs, particularly for social security and medicare. Demographic conditions affect longrun costs. (See appendix B for a discussion of demographic issues.) Table 6 shows key economic conditions affecting work-related entitlement programs. The real wage differential (the difference between an index of wage growth and price increases), a measure of economic growth, is the most significant shortrun factor in the financial health of the social insurance system.

Table 6-A.—ECONOMIC EXPERIENCE AND ASSUMPTIONS

[In percent]

Year	Actual		
	Consumer Price Index (increase)	Real wage differential	Average annual unemployment
1950-54	2.4	3.8	4.0
1955-59	1.6	2.6	5.0
1960-64	1.3	2.1	5.7
1965-69	3.4	2.0	3.8
1970-74	6.1	.2	5.4
1975-79	8.0	−.1	7.0
1980	13.5	−4.9	7.1
1981	10.3	−1.5	7.6

Table 6-B.—ECONOMIC EXPERIENCE AND ASSUMPTIONS

[In percent]

Year	Estimates					
	Consumer price index (increase)		Real wage differential		Average annual unemployment	
	II-B	III	II-B	III	II-B	III
1982	6.9	7.2	−0.3	−0.9	9.1	9.3
1983	7.9	9.6	.2	−2.3	8.5	9.8
1984	7.4	9.6	.7	−1.8	8.0	9.6
1985	6.6	9.2	.3	.0	7.7	8.8
1990	4.5	7.2	1.5	.8	6.1	6.9
2000 and beyond	4.0	5.0	1.5	1.0	5.0	6.0

Source: Office of the Actuary, Social Security Administration.

During the 1950's and 1960's, a period of 20 years, Americans became accustomed to low unemployment, low inflation, and strong economic growth. If these had persisted, social security's trust fund would not be in trouble. However, during the 1970's, real wage growth was negative, thereby throwing social security's trust fund into its present shortage. Projections do not show the economy growing at anywhere near earlier levels. After projected anemic growth during the remainder of the 1980's, both sets of assumptions include a positive level of real wage growth, higher than recent experience but much lower than in the 1950–69 period. If there is insufficient economic growth to generate positive real wage growth, social security will continue to have financial problems.

Performance of other pension program financing is not tied as directly to economic conditions. These programs do not depend on payroll taxes sensitive to economic conditions, but are financed mainly from general revenues. In addition, their employment levels are not necessarily affected by overall levels of employment.

In all programs (except medicare) increases in both wages and prices directly affect program costs. Rates of wage growth push up initial benefit amounts, and price increases boost them after retirement.

(B) Financial Conditions for the Shortrun and Intermediate Period

In the 10-year "shortrun" period, 1983 through 1992, expenditures for work-related entitlement programs are projected to continue to grow. As table 7 indicates, total budget expenditures for these programs will more than double by 1992, if the II–B assumptions are realized, they will increase by 174 percent under assumptions III. This projected growth takes place without any explicit change in law to increase benefits, and it assumes that Congress does nothing to restrain the growth. The projected growth is caused by:

(1) Continued increases in the cost of living.

(2) Additional recipients joining the rolls from the yet unmatured systems.

(3) Continued increases in wages.

Table 7.—EXPENDITURE PROJECTIONS FOR WORK-RELATED ENTITLEMENT PROGRAMS UNDER DIFFERENT ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS, 1983–92

[In billions of dollars]

Year	Social security		Medicare		Civil service		Military		Railroad		Total	
	II–B	III	II–B	III	II–B	III	II–B	III	II–B	III	II–B	III
1983	169.4	170.1	39.5	39.5	21.8	21.9	16.3	16.4	5.4	5.4	252.4	253.3
1984	185.9	189.4	45.0	45.2	24.1	24.4	17.5	17.7	5.7	5.9	278.2	282.6
1985	204.9	213.1	50.6	52.4	26.4	27.2	18.8	19.3	6.1	6.4	306.8	318.4
1986	223.8	238.7	56.8	61.8	28.9	30.8	20.4	21.7	6.4	6.9	336.3	359.9
1987	243.1	266.4	64.7	72.2	31.3	34.3	21.9	24.0	6.7	7.5	367.7	404.4
1988	262.5	295.8	73.6	85.1	33.7	38.0	23.5	26.5	7.1	8.0	400.4	453.4
1989	282.7	326.8	83.5	100.1	36.1	42.1	25.1	29.2	7.4	8.6	434.8	506.8
1990	303.3	359.7	93.1	117.0	38.6	46.1	26.7	31.8	7.7	9.1	469.4	563.7
1991	232.9	394.2	105.6	136.7	41.1	49.6	28.3	34.1	7.9	9.6	506.8	624.2
1992	344.6	430.3	119.8	159.7	43.6	53.5	29.9	36.4	8.3	10.0	546.2	689.9
Total	2,544.1	2,884.5	732.2	869.7	325.6	367.9	228.4	257.1	68.7	77.4	3,899.0	4,456.6

Source: Office of the Actuary, Department of Defense, Social Security Administration, Health Care Financing Administration, Office of Personnel Management, and Railroad Retirement Board. Estimates were done in October and November 1982 based on economic and demographic assumptions from the 1982 trustees' report of the social security system. These will differ from budget estimates in the 1984 budget, because, among other reasons, the latter will be based on more recent economic and demographic assumptions.

A widening gap in costs from different assumptions in alternatives II–B and III occurs during the 10-year period. This difference shows up more often in the social insurance programs, with medicare spending four times more in 1992 than in 1983 under assumptions III. The II–B assumptions would have medicare growing from $39.5 billion in 1983 to $119.9 billion in 1992, thus increasing by a factor of three.

The following sections discuss the shortrun and intermediate outlook for the individual work-related entitlement programs. Because these programs face financing issues of different kinds and intensities, the format and approach of the discussions will vary, depending on the perspective appropriate to the particular program. These points are discussed in greater detail in the chapters which follow on the individual programs.

(1) SOCIAL SECURITY'S CURRENT SHORTRUN TRUST FUND SHORTAGE

In November 1982, the National Commission on Social Security Reform agreed that a combination of benefit cuts and revenue increases totaling between $150 billion to $200 billion over the 7-year period, 1983 through 1989, would be required to provide adequate resources to the social security trust fund. These additional funds, amounting to an average of $21 billion to $28 billion per year, will have to be comprised of new revenues from taxes, reductions in benefits, or some combination of the two. On January 15, 1983, the Commission agreed on a package totalling $168 billion of benefit reductions, payroll tax increases, and transfers from the general fund which taken together would provide the social security trust funds with sufficient funds to enable benefit payments to continue to be made on time. (Table 8 indicates the changes to be made in the program. See discussion in chapter III for more complete description of these proposals.)

Table 8.—PROPOSALS OF NATIONAL COMMISSION ON SOCIAL SECURITY REFORM

II–B Assumptions

[In billion of dollars]

	1983–89
Cover nonprofit and new Federal employees	20
Prohibit withdrawal of State and local government employees	3
Taxation of benefits for higher income persons	30
Shift COLA's to calendar-year basis	40
Revise tax-rate schedule	40
Revise tax basis for self-employed	18
Credit OASDI trust funds for cost of military service wage credits	18
Other	−1
Total	168

Source: Report of the National Commission on Social Security Reform, January 1983.

The trust fund shortfall is very sensitive to economic conditions and to the level of desired trust fund reserves. The amount required over the 7 years could be as little as $62 billion or as much as $246 billion depending on the combination of economic assumptions and trust fund balance sought (see table 9). The vigor of economic recovery and the agreed upon optimum level of trust fund balances will determine the required amount.

Table 9.—SOCIAL SECURITY (OASD(H)I) SHORT FALL—1983-89

[In billions of dollars]

For trust fund reserve ratio of—	II-B		III	
	OASDI	OASDHI	OASDI	OASDHI
9 percent (1 month)	62	59	187	225
30 percent	113	123	246	301

A 9-percent level of reserves is the minimum amount always needed on hand to make monthly payments on time. If this level of reserves were established as the target, it would be necessary to build in automatic stabilizing features to insure that payments could continue if estimated fund needs were exceeded. The 9-percent level provides no contingency, if, for example, economic growth is less than expected. Various stabilizing features were considered by the National Commission on Social Security Reform and one, basing COLA adjustments on the lower of wage growth or price growth, was recommended beginning in 1988. Legislative proposals to stabilize trust funds were considered, but not enacted by past Congresses. One such proposal would have permitted social security borrowing from the general fund if unemployment were to reach a certain level.

Some have suggested a desirable trust fund level of 30 percent to be achieved by 1989. This level of reserves would function as a contingency so that even given short-term adverse economic conditions payments could be made to recipients.

The 30-percent level, while adequate, is small compared to historical levels. A recent social security advisory council recommended that the fund balances be 75 percent of a year's benefit payout—substantially higher than the 30 percent. The National Commission on Social Security Reform's recommendations would leave the trust fund level at the beginning of 1990 at between 8 and 34 percent, depending on economic assumptions.

Any buildup in the nearly depleted social security trust fund will require a period during which revenues entering the trust fund exceed benefit payments. Because social security is part of the unified budget, a trust fund buildup (with tax revenues exceeding benefit payouts) reduces the Federal deficit. A trust fund buildup can be accomplished by reducing benefits. Proposals to do this are labeled by social security advocates as "balancing the budget on the backs of the elderly."

Because of already enacted payroll tax increases, the social security trust funds are projected to grow, under the II-B assumptions, for the 25 years after 1990. Some have argued that this trust fund buildup would help meet the retirement costs of the large baby boom generation, but this is not possible because any trust fund assets will be the Government's own securities and the excess of revenues over expenditures will simply reduce the Government's need for borrowing or taxing in each year of the buildup. Under current II-B projections, the trust fund is assumed to build up to $700 billion (in 1982 dollars) by 2015. While this may make the social security system seem more financially secure, when the time comes for the accelerated outlays to begin, social security benefit payments are projected to exceed payroll tax revenues by large amounts. Each year that trust fund payments exceed revenues, the difference must be made up by increased borrowing from the public or increased taxes, which would have the effect of reducing trust fund assets and thus repaying part of the loan to the Treasury. This is true in every year trust fund payments exceed revenues, regardless of the size of the trust fund.

If assumptions III are used, there is no trust fund buildup at all during this period. Under these more pessimistic assumptions, benefit outlays exceed projected tax revenues for the entire period.

If the trust fund buildup does occur as projected (using assumptions II-B), one possibility is to direct the excess payroll taxes to the medicare trust fund. Starting in the late 1980's or early 1990's medicare's trust fund runs dry.

(2) MEDICARE—A PROBLEM FOR THE 1990's [4]

The financing principles used in analyzing the hospital insurance (HI) portion of medicare are similar to those in the social security cash benefit programs. The hospital insurance program is designed to be self-supporting with both benefits and program administration paid from the HI taxes on insured persons and employers.

Under present law, the adequacy of HI financing is measured by comparing, on a year-to-year basis, the actual tax rates specified by law with corresponding total costs of the program expressed as a percentage of taxable payroll. If these two items are exactly equal in each year of a 25-year projection period, and all projection assumptions are realized, tax revenues and interest income will be enough to pay benefits and administrative expenses for insured persons while maintaining the trust fund at a specified level. Congress has approved an HI tax schedule with rate changes occurring at intervals of several years, rather than yearly increases to match exactly with projected cost increases. The actuarial balance of the HI program is defined as the excess of the *average* tax rate for the 25-year valuation period over the average cost of the program. This is expressed as a percentage of taxable payroll over the same period.

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[4] This section is excerpted from chapter IV of this report, "Medicare," by Glenn R. Markus.

Since medicare's inception in 1965, the financial experience of the HI program has been unfavorable, in that actual costs have always outstripped projected amounts. The trustees of the hospital insurance trust fund have reported that, on a long-range basis, the HI program has been in deficit during 13 of the last 14 years (see table 10 below).

Table 10.—LONG-RANGE FORECASTS OF THE HOSPITAL INSURANCE PROGRAM

[As percentage of taxable payroll]

25-year estimate made in calendar year	Average cost[1]	Scheduled tax rate[1]	Actuarial balance
1966	1.23	1.23	
1967	1.23	1.23	
1968	1.38	1.41	−0.03
1969	1.79	1.50	−.29
1970	2.04	1.56	−.48
1971	2.20	1.58	−.62
1972	2.21	1.60	−.61
1973	2.67	2.63	−.04
1974	2.63	2.65	+.02
1975	2.86	2.70	−.16
1976	3.39	2.75	−.64
1977	3.96	2.80	−1.16
1978	3.86	2.74	−1.12
1979	3.82	2.78	−1.04
1980	3.80	2.81	−.99
1981	4.28	2.84	−1.44
1982	4.93	2.86	−2.07
1982 (TEFRA)	4.34	2.86	−1.48

[1] Average for the 25-year period, using intermediate range economic assumptions (II-B assumptions in recent years).

Provisions of the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 reduced the longrun costs of hospital insurance by 0.59 percent of taxable payroll, but this still leaves a projected actuarial imbalance of 1.48 percent of payroll. To correct this longrun deficit, revenue to hospital insurance would have to be increased by about $20.7 billion (in 1982 terms) in *each* of the next 25 years. The ratio of program expenditures to taxable payroll is shown in table 11 below.

Table 11.—EXPENDITURES AND TAX RATES OF THE HOSPITAL INSURANCE PROGRAM

II-B Assumptions

[As percentage of taxable payroll]

Calendar year	Expenditures	Scheduled tax rate	Difference
Historical data:			
1967	0.95		
1968	1.05		
1969	1.13		
1970	1.21		
1971	1.33		
1972	1.31		
1973	1.34		
1974	1.42		
1975	1.69		
1976	1.83		
1977	1.95		
1978	2.02		
1979	2.00		
1980	2.21		
1981	2.39		
Projections: [1]			
1982	2.97	2.60	−0.37
1983	2.58	2.60	+.02
1984	2.67	2.60	−.07
1985	2.74	2.70	−.04
1990	3.51	2.90	−.61
1995	4.47	2.90	−1.57
2000	5.38	2.90	−2.48
2005	6.29	2.90	−2.39
Average: [1]			
1982–2005	4.34	2.86	−1.48

[1] Takes into account amounts to be loaned to the social security retirement and survivors (OASI) program under interfund borrowing authority. The loan is not assumed repaid under II-B economic assumptions. No allowances are included for building or maintaining the trust fund balance.

The near-term financing situation for the hospital insurance program is also severe. In September 1982, the trustees reported that unless Congress acts to increase program revenues or reduce outlays, or some combination thereof, the hospital insurance trust fund would begin paying out more than it takes in during 1988 and it would be depleted during 1991.

The trustees of the hospital insurance program have reported to Congress that the tax rates currently in the law will be able to meet program expenditures and make loans already scheduled to the social security retirement and survivors programs for only the next 5 to 9 years. The present financing schedule over the entire 25-year valuation period is not adequate.

(3) Financial Imbalance in Civil Service Retirement

The two larger Federal Government pension programs are not faced with trust fund shortages: military retirement because it has no trust fund, and civil service retirement because sufficient funds are transferred to its fund from the general fund to keep it growing faster than benefit payments.

Military retirement funds are appropriated each year from the general fund and paid to eligible recipients. Employees pay no part of the retirement costs, all of which are paid through the defense budget. As discussed below, the lack of a trust fund has no real effect on program costs and benefits.

The civil service retirement system does have a trust fund that has grown over the years. Sources of revenues to this trust fund are mainly internal to the Government, see table 12. During 1983 through 1992, total income to the trust fund is projected at $498 billion. Of this, 13 percent is from employee contributions, 28 percent from interest on trust fund assets, and 59 percent from other Government transfers. Only the 13 percent from employee contributions comes from outside the Government.

Table 12.—INCOME TO THE CIVIL SERVICE RETIREMENT FUND

[In billions of dollars]

Year	Employee contributions	Agency contributions	30-year amortization payments	Interest on unfunded liability	Military payment	Investment income	Total income
1983	4.7	4.7	5.1	9.8	1.5	9.7	35.5
1984	5.0	5.0	6.0	10.5	1.7	10.8	39.0
1985	5.4	5.4	6.9	10.9	1.8	11.8	42.2
1986	5.8	5.8	7.7	11.2	1.9	12.7	45.1
1987	6.2	6.2	8.6	11.6	2.0	13.5	48.1
1988	6.6	6.6	9.5	12.0	2.1	14.3	51.1
1989	7.1	7.1	10.5	12.4	2.1	15.1	54.3
1990	7.5	7.5	11.5	12.8	2.2	16.0	57.5
1991	8.0	8.0	12.5	13.2	2.3	16.8	60.8
1992	8.4	8.4	13.5	13.6	2.4	17.7	64.0
Total	64.7	64.7	91.8	118.0	20.0	138.4	497.6

Source: Office of the Actuary, Office of Personnel Management. Based on social security II-B assumptions.

The civil service retirement trust fund grew rapidly during the 1970's, when trust funds financed by payroll taxes were having difficulty, because of changes in the law of 1969. At that time, the Congress considered the issue of the unfunded liability of the civil service retirement system. Congress decided to make paper transfers (issue special notes on I O U's to itself) to the civil service retirement trust funds in sufficient amount to keep the fund growing. These transfers have no effect on Federal outlays nor on the Federal deficit. The transfers were for interest that would have been earned if the unfunded liability had been funded, amortization of certain unfunded liabilities, agency contributions, and interest on transferred assets. Interest on the unfunded liability and interest on assets have been growing, and along with them the trust fund. Congress also built up the trust fund by amortizing additions to the unfunded liabilities caused by (1) new or liberalized benefits (except cost of living adjustments), (2) extension of coverage to previously uncovered employees, and (3) increases in salaries on which benefits are computed. Additional transfers were authorized in the form of agency contributions to match employee contributions. Table 13 shows the operations of the civil service retirement program from two perspectives: effect on the unified budget and effect on the trust fund.

Table 13.—RECEIPTS AND EXPENDITURES FOR CIVIL SERVICE RETIREMENT—1983-92: BUDGET PERSPECTIVE AND TRUST FUND PERSPECTIVE

[In billions of dollars]

	Assumptions
	II-B
Receipts and expenditures:	
Budget expenditures	325.6
Receipts	64.7
Excess of expenditures over receipts [1]	260.9
Trust fund perspective:	
Income to the trust fund	497.4
Budget expenditures	325.6
Net increase in fund	171.8

[1] $30 billion of this will come from Postal Service contributions.

Source: Office of Personnel Management and Hay Associates.

Of the total benefit payments of $325.6 billion during 1983-92 (II-B assumptions) one-fifth or $64.7 billion will come from employee contributions. The remaining $260.9 billion will come from tax revenues or borrowing. During this same period, the trust fund financing mechanisms will result in a net addition to the trust fund of $172 billion.

In effect, the trust fund is owed by the Federal Government to itself. The civil service retirement program affects the Federal budget and the economy by the extent to which its outlays for benefit payments each year differ from employee contributions that year.

The commitment to make benefit payments is essentially the same in the military retirement and civil service retirement. Only the employee contributions in civil service retirement make a difference. *The size of the trust fund and the amount of the unfunded liability do not affect outlays or the budget deficit now or in the future* if trust fund assets are invested in the Government's own securities. Eligibility requirements and benefit formulas, both established by statute, determine the extent of the Government's obligation to make payments.

Both programs are de facto pay-as-you-go systems, even though one has a trust fund and the other does not. The Congress could completely "fund" (on its own books) a trust fund for military retirement and for civil service retirement by creating assets for the trust funds. This would have no shortrun or longrun effect on budget outlays or on the deficit.

(4) FINANCING ISSUES IN MILITARY RETIREMENT [5]

There are approximately 1.4 million annuitants in the military retirement system: 1.3 million disability and nondisability retirees, plus about 79,000 survivor annuitants. This large population stems from World War II and from U.S. policy, dating from the beginning of the Korean war, to maintain large standing military forces to defend its security interests around the world.

For the 20-year period, fiscal year 1980–fiscal year 2000, projections show that the number of military retirees and survivor annuitants will increase between 46 to 51 percent. By fiscal year 2000, the number of retirees and survivor annuitants will approximate 2 million, almost duplicating the size of the active duty forces today. The number of survivor annuitants is expected to grow at the fastest pace: from about 66,000 to around 221,000 to 223,000—a 235- to 238-percent increase.

The Defense Department will spend about $16.4 billion—about $11,515 per beneficiary—in fiscal year 1983 to pay retired pay and survivor annuities. These outlays will constitute about 7.5 to 8 percent of estimated total DOD outlays for fiscal year 1983. In comparison, total expenditures for retired pay and survivor annuities in fiscal year 1960 were $0.693 billion—$2,365 per recipient—and accounted for about 2 percent of DOD outlays. Indeed, from fiscal year 1960 to fiscal year 1980 the budget for the military retirement system grew faster (+1,600 percent) than the total DOD budget (+252 percent).

Outlays for the military retirement system as a share of total DOD outlays have declined somewhat since fiscal year 1980 when they reached a peak 9-percent share. Likewise, appropriations for the military retirement system have risen less rapidly than the total appropriations for DOD. If the administration's long-range defense spending goals are not modified, estimated outlays for the retirement system in fiscal year 1985—about $18 billion—will be about 6.5 percent of total DOD outlays. This trend, of course, should be expected as more dollars are spent on current defense needs.

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[5] This section is excerpted from chapter VI of this report, "Cost and Benefit Issues in Military Retirement," by Paul C. Zinsmeister.

The Defense Department estimates that outlays for the military retirement system in fiscal year 1983 will be about 57 percent of outlays for basic pay. Indeed, the Department's 75-year projections indicate that outlays for the military retirement system under the pay-as-you-go financing policy will average from 58.1 percent of basic pay costs for the II-B assumptions to 68.2 percent for DOD's pessimistic assumptions. The "most likely" projection indicates that retirement costs will average 63.5 percent. These ratios contrast to fiscal year 1970, when retirement costs were 22.2 percent of basic pay.

Despite concern over costs and numerous studies proposing cost-saving changes, there has been a reluctance to radically alter the basic structure of the military retirement system. Although, in 1980 Congress did change the base upon which retired pay is calculated—from final basic pay to an average of the highest 36 months of basic pay earned while in active service—this change will not begin to yield appreciable savings until well into the 21st century. It applies only to members who join the military services after September 7, 1980, and who would retire in the year 2000 at the earliest. In addition, in 1982, Congress restricted COLA to one-half the projected CPI increase for retirees under age 62 to be effective for the next 3 years.

Two obvious conclusions emerge from the foregoing discussion of the cost of the military retirement system. First, the Federal Government has accrued a substantial financial obligation for past defense. Second, if the United States continues to maintain active and reserve forces at strength levels on the order of 3 million persons for current defense, a substantial part of the cost of that decision will be in retired pay and survivor annuities many years in the future.

(5) THE APPROACHING DISASTER IN RAILROAD RETIREMENT [6]

The railroad retirement system is once again threatened with insolvency. In spite of changes enacted in 1981, the chief actuary of the Railroad Retirement Board projects that the program might be unable to meet all demands for payment using the full resources at its disposal as early as April 1984. Provisions in the 1981 legislation intended to prevent insolvency may require railroad retirement benefits to be substantially reduced, beginning October 1 of 1983, unless Congress takes action before then.

Changes to taxes and benefits in 1974 and 1981 were intended to balance the system. Yet in every fiscal year since 1974, benefits have exceeded income, thereby drawing down RRS trust fund reserves. In 1974, the trust fund balance was $4.284 billion (see table 14).

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[6] This section is excerpted from chapter VII of this report, "Railroad Retirement: Can the Oncoming Disaster Be Sidetracked?" by Dennis Snook.

Table 14.—RAILROAD RETIREMENT TRUST FUND OPERATIONS, FISCAL YEAR 1975 THROUGH FISCAL YEAR 1982

[In millions of dollars]

Fiscal year	Income [1]	Outgo [2]	Trust fund balance [3]
1974			
1975	2,781	3,117	4,284
1976	3,289	3,524	3,950
Transitional quarter	481	1,038	3,157
1977	3,743	3,701	2,929
1978	3,934	4,116	2,773
1979	4,267	4,381	2,658
1980	4,481	4,887	2,252
1981	4,832	5,457	1,627
1982 (est.)	4,855	5,560	922
1983 (est.)	6,385	7,150	157
—1981 low point (April)			1,106
—1982 low point (April)			−20 to −25

[1] Taxes, interest on investments, appropriations for windfalls, net financial interchange.

[2] Benefits, net transfers to administration.

[3] Includes amounts owed to this account.

Source: Railroad Retirement Board.

During April 1981, reserves dropped to $1.106 billion. In April 1982, the Board estimated that reserves at the end of that month would fall within a range of −$20 to −$25 million. Thus, for the first time, the Railroad Retirement Board projected a trust fund reserve which could fall below zero. Under provisions of 1981 legislation, railroad retirement borrowed money from the general treasury for benefit payments. This money was repaid during the same month because of a favorable revenue benefit relationship in May. Borrowing authority was activated again in January 1983.

As part of the legislation to avoid an impending financial crisis, in 1981, railroad retirement was given authority to borrow from the Treasury. The borrowing authority is restricted in any one year to the amount due the railroad retirement account from social security through the financial interchange payment.[7] Under the 1981 legislation, in any year that the Board determined that the need to borrow would exceed 50 percent of the total payment due from social security, the board was required to project the year in which borrowing authority would be exhausted. The legislation required railroad retirement to implement benefit reductions sufficient to prevent trust fund insolvency.

On November 16, 1982, the Railroad Retirement Board circulated a memorandum prepared by the chief actuary and the director of research of the Board, projecting that 50 percent of the borrowing authority would be needed in fiscal year 1983. Thus, under terms of the legislation, the additional required projections and announcements were made—setting the stage for possible benefit reductions beginning in October of 1983.

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[7] Financial interchange will be explained in chapter VII of this report. It is a payment to railroad retirement from social security because railroad retirement pays out more in tier I benefits (the part of railroad retirement comparable to social security) than it collects in payroll taxes.

Table 15 shows the progress of the railroad retirement fund under two different employment projections. Under projection A, all borrowing authority will be exhausted in fiscal year 1985, and in B, borrowing authority will be exhausted in fiscal year 1984. As the table notes, however, if the railroad unemployment insurance program is prevented from borrowing from the retirement account, the retirement account can also remain solvent into fiscal year 1985 under projection B. Obviously, other financial arrangements would have to be made to keep the unemployment insurance program solvent—implying the same kinds of benefit cuts or borrowing or taxing increases to keep that fund afloat.

Table 15.—FINANCIAL DEFICIENCY OF THE RAILROAD RETIREMENT ACCOUNT UNDER TWO SETS OF EMPLOYMENT ASSUMPTIONS, FISCAL YEAR 1983 THROUGH FISCAL YEAR 1992

[In millions of dollars]

Fiscal year	Estimate A			Estimate B		
	Amount needed	Available borrowing authority	Excess	Amount needed	Available borrowing authority	Excess
	(a)	(b)	(a–b)	(c)	(d)	(c–d)
1983	1,057	1,867		1,096	1,867	
1984	1,856	2,011		2,097	2,075	22
1985	2,627	2,107	530	3,120	2,229	891
1986	3,403	2,140	1,263	4,166	2,304	1,862
1987	4,287	2,187	2,100	5,327	2,389	2,938
1988	5,256	2,276	3,010	6,613	2,496	4,117
1989	6,324	2,553	3,971	8,015	2,605	5,410
1990	7,380	2,426	4,954	9,483	2,721	6,762
1991	8,357	3,365	5,992	10,886	2,699	8,187
1992	9,487	2,377	7,110	12,459	2,733	9,726

NOTE.—These estimates assume that money will continue to be drawn from this account into the railroad unemployment insurance account as needed to keep it solvent. If that authority is halted beginning in fiscal year 1984, under estimate B, borrowing authority would not be exceeded until fiscal year 1985.

Source: Railroad Retirement Board, Nov. 16, 1982.

As table 15 shows, benefit payments will generally exceed revenue to the account by over $1 billion annually for a cumulative deficit of between $9.5 billion and $12.5 billion by 1992.

LONGRUN COST PROJECTIONS

Projections of future benefits and their costs depend on economic and demographic assumptions. Long-term projections are highly sensitive to demographic factors such as fertility, mortality, and disability. Other demographic factors such as rates of immigration, marriage, divorce, and age at retirement are important to estimates of the work force and beneficiary composition. Actuarial projections are even more sensitive to economic factors, especially growth rates of real wages and levels of real interest rates. Still other economic variables, such as labor force participation and unemployment, also influence cost estimates. For any given set of assumptions about these economic and demographic variables, estimates of future benefits and their costs can be made. The underlying assumptions, however, are subject to a high degree of uncertainty. Actuarial projections are not predictions. They are merely extrapolations. Because differences between assumptions and actual experiences are inevitable, projections are subject to considerable uncertainty. It is, however, necessary to adopt one or more sets of assumptions and to project future costs and benefits to ascertain whether or not a program would be financially sound under specified conditions. Social insurance and pension programs require long-range planning, including longrun estimates.

In recent years, social security analysts have generally used three (or four) sets of assumptions, usually labeled optimistic, pessimistic, and intermediate. The projections using the optimistic and pessimistic assumptions have been thought to indicate a plausible range within which future costs and benefits could reasonably be expected to fall. In past years, the projections based on the intermediate assumptions have been used for planning purposes because it is too cumbersome to deal with a wide range of future possibilities. As noted earlier, this report employs the intermediate and the more pessimistic assumptions used to project social security and medicare costs. In this study, the same assumptions are used for the other work-related entitlements also. Thus, for comparative purposes, the costs of the civil service retirement, military retirement, and railroad retirement programs were all estimated with social security's II–B and III economic and demographic assumptions, although actuaries of these programs customarily use their own somewhat different assumptions for making official program cost estimates.

Social security's intermediate assumptions (called II–B) are now generally considered too optimistic for shortrun analysis (over the next 10 years) although II–B assumptions are considered the most appropriate for longrun analysis. For shortrun analysis, social security's more pessimistic assumptions (III) may represent the economic outlook more closely. Both are used in this report when appropriate.

Longrun projections can be made for different time periods, the most common being 75 years. The function of such longrun projections is to provide early warnings about possible adverse developments. The early warnings, in turn, permit gradual rather than sudden changes to be made when necessary to strengthen the financing of the programs. By updating these projections on a regular basis and by revising assumptions in light of emerging trends, actuaries provide a flexible frame of reference for assessing actuarial balance between costs and benefits of social insurance and pension programs.

In summary, actuarial projections of future costs and benefits provide information for making responsible longrun plans. These projections, however, are only estimates based on uncertain assumptions about future economic and demographic developments. Whenever either economic or demographic trends shift abruptly, past assumptions and the projections based on them will be grossly inaccurate. When such shifts occur, longrun projections permit adequate time to consider what adjustments are appropriate to meet the changed circumstances before a crisis occurs.

(A) Longrun Costs As Percent of Payroll

Longrun cost analysis for social insurance and pension programs requires concepts and techniques not used in the shortrun analysis. (See appendix, p. 92, for a detained discussion of actuarial concepts and techniques and shortrun and longrun cost projections for work-related entitlements.)

Longrun costs are expressed not in dollars, but in "percent of payroll." This measure is calculated by dividing the total benefit amount in a year by the total amount of wages and salaries. Percent of payroll is used because dollar costs become so large in the long run (usually growing over 75 years for social security and pension programs and 25 years for medicare) even assuming only modest inflation rates, say 4 or 5 percent, the frame of reference becomes lost. Expressing costs as a percent of payroll permits (1) retirement benefits to be compared with wages and salaries paid, (2) analysis of total compensation, and (3) comparison of *relative* costs among plans.

Longrun costs in this report are expressed according to two different concepts for funding them: intergenerational transfer (pay-as-you-go) and advance funded. Pay-as-you-go funding assumes that the costs of retirement benefits to a group of retirees will be borne by the generation of workers still working. Workers' taxes, both payroll and general revenues, will finance payments to retirees. On the other hand, advance funding sets money aside during the working life of an employee so that retirement credits can be accrued. The concept of advance funding is most appropriate to private pensions where reserves must be invested in securities outside the organization. Under requirements of the Employee Retirement

Income Security Act (ERISA), funds should be large enough so that the combination of funds set aside, together with the interest earned, will be sufficient to pay an annuity to the retired employee over his remaining life. Advance funded systems are required to pay off or amortize any projected short falls or "unfunded liabilities" over a 30- or 40-year period. This adds substantially to advance funded costs because most plans, upon inauguration, make accrued benefit rights available immediately to employees with past (unfunded) work service. Furthermore, any benefit increases arising from unanticipated experience or legislated increases create new unfunded liabilities.

Both pay-as-you-go and advance funded methods were used in this study to estimate longrun costs of social insurance and pension programs. Irrespective of the system used to *measure* costs, however, the de facto practice for funding the Government retirement systems is the pay-as-you-go approach. The social security, medicare, and military retirement systems are funded on this basis. Railroad retirement, once partially advance funded, has become a pay-as-you-go transfer system. Civil service retirement is partially advance funded on the books of the Government, but, because the fund is internal to the budget and constitutes an I O U the Government has written to itself, the funding system is, in the final analysis, mostly a pay-as-you-go system.

There are reasons for calculating costs under the advance funding concept. One reason, more pertinent for Government retirement systems than for social security, is to inform taxpayers of the accrued cost of benefits for current workers. Finally, an advance funding measure may be used as a guide even when advance payments are not made. The advance funding measure is often used to (1) compare the costs of Government and private sector retirement plans, (2) measure total compensation, and (3) determine the cost of Government employment.

Social security and medicare long-term costs are typically presented on the pay-as-you-go method. The Government's pension programs usually have been shown as advance funded, even though they could not, in fact, be truly advance funded because their trust fund assets consist of the Government's own securities.

This report shows longrun costs for all programs both as pay-as-you-go systems and as advance funded systems (see table 16). The advance funded comparisons are substantially higher because they include the cost of amortizing unfunded liabilities. However, after 40 years the advance funded systems would be less costly because unfunded liabilities would be fully funded and only payment of the normal cost would be required.

As noted earlier, longrun costs are typically presented as a percent of covered payroll. In pay-as-you-go systems, like all work-related entitlements are in reality, an estimate is made of the amount of benefits to be paid in each year, then divided by the total amount paid in salaries and wages to active employees in that same year. This ratio is the percent of payroll needed to finance benefits. The 75-year average over the actuarial period is the longrun cost expressed as percent of payroll. Of course, the payroll is different in each program. Social security's covered payroll includes all salaries and wages against which social security taxes are charged, but in pension programs, the payroll is simply the amount their own agency or industry pays out in wages and salaries.

Table 16.—LONGRUN (75-YEAR) ACTUARIAL COSTS OF WORK-RELATED ENTITLEMENT PROGRAMS

Plans	Cost on two bases as percent of payroll				
	Pay-as-you-go intergeneration			Advance funding	
	II-B	III		II-B	III
Social Security	14.1	18.7	Normal cost	15.0	19.6
			Amortization of liability.	8.7	9.8
				23.7	29.4
Medicare	7.9	N/A	N/A	N/A	
Military	55.1	61.8	Normal cost	41.5	49.1
			Amortization of liability.	50.9	58.6
				92.4	107.7
Civil service	36.1	40.6	Normal cost	30.9	36.6
			Amortization of liability.	20.8	23.9
				51.7	60.5
Railroad retirement	14.2	15.2	Normal cost	7.0	7.6
			Amortization of liability.	12.8	13.1
				19.8	20.7

Source: Actuarial projections, using social security II-B and III assumptions as requested by the Congressional Research Service, provided by the Office of the Actuary in five departments and agencies: Social Security Administration, Health Care Financing Administration, Office of Personnel Management, Department of Defense, and the Railroad Retirement Board. To insure completeness and consistency, needed modifications of the data were made by Hay Associates.

Table 16 above shows longrun costs for work-related entitlement programs under different economic and demographic assumptions. Calculations are presented using both actuarial concepts, pay-as-you-go, and advance funding. The advance funding cost estimates show what large amounts of funds would have to be set aside from current workers, over a 40-year period to pay off benefit rights already accrued by employees and retirees, while simultaneously setting aside sufficient funds from workers to fully fund their own eventual retirement. The "normal cost" (see appendix, p. 94) is the amount needed to fund pension costs for a cohort of entering workers. Normal cost plus the cost of amortizing unfunded liabilities equals the total advance funded cost of a system.

From the beginning, social security was conceived not as the sole source of retirement income, but as a base on which to build retirement income. Indeed, only 12.6 percent of families with a person 65 or older receive income from social security only. The longrun cost of social security, on a pay-as-you-go basis, looks relatively modest, at 14.1 percent of payroll (II–B assumptions) or about one-third the cost of civil service and one-fourth the cost of military retirement. A typical private pension, integrated with social security, might itself cost roughtly 8 to 10 percent of payroll, and, if this were added to social security, the combination typical in the private sector of social security plus a private pension would cost around 22 to 24 percent of payroll. The railroad retirement cost looks relatively small also (14.2 percent of payroll), only slightly higher than social security. This is, however, just for the private pension component of railroad retirement, which also includes a social security component. Total railroad retirement would be 28.3 percent of payroll, higher than the private sector counterpart, but still substantially lower than civil service (36.1 percent), and military retirement (61.8 percent).[8]

Civil service and military retirement are costly primarily because they have higher average benefits, either initially or eventually because they are fully indexed, and liberal early retirement privileges. In the military retirement system, fully indexed payments can begin after 20 years of military service. These benefits will be received during the remainder of the individual's life regardless of what other sources of earned or retirement income. At 58.1 percent of payroll, military retirement is, by far, the most costly of the four retirement systems. In addition, the military retiree will become fully entitled to social security payments which, when added to the military retirement costs, boost the overall cost to 72.2 percent of covered payroll. Civil service retirement does not cost as much as military retirement, but the cost is substantially higher than most private sector counterparts. The 36.1 percent of payroll cost is due to relatively high average benefit amounts, plus retirement at age 55 with unreduced fully indexed benefits. Some 80 percent of civil service retirees eventually qualify for social security cash payments, thus increasing the overall Federal retirement cost of their retirement income.

Cost of the medicare (hospital insurance—HI) program is estimated at 7.9 percent. The maximum HI tax rate now in the law will be 2.9, indicating the serious long-term funding crisis for medicare if the present rate of hospital cost increase continues.

If the more pessimistic III assumptions are used, the costs go up for all the systems. They go up more—by a third—for social security, compared to 12 percent for civil service retirement and 6 percent for military retirement. The greater difference for social security is that, overall, unfavorable economic and demographic assumptions are more crucial for this universal program than they are for the Federal retirement systems which limit their effect to one employee group.

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[8] Military retirement is based on "basic pay," not total compensation, and social security does not base benefits on total pay but has a cap. Therefore, costs of these systems are high relative to civil service retirement.

Advance funded cost estimates show the difference between the current pay-as-you-go approach and the amount which would be required if current unfunded liabilities were amortized over 40 years (ERISA requires unfunded liabilities for private sector plans must be amortized over 30 or 40 years), and if the normal cost were paid for those workers currently earning retirement credits. Proposals to "privitize" social security (make it voluntary or replace it with mandatory private plans) or to dismantle railroad retirement (as proposed by the administration last year) would face this cost situation.

The longrun trend in pay-as-you-go program costs (as a percent of payroll) demonstrates change in the relationship between retirement benefit costs and payroll costs over the period (see table 17). Social security costs stay constant, even declining somewhat, until 2010, when the baby boom generation starts retiring. Military retirement and civil service retirement are high but relatively constant because the assumption was made that their current level of employees would be maintained during the entire period. The eventual decline in military retirement costs will occur after the retirees from the peak years of World War II and the Korean war leave the roll. Railroad employment has declined from a peak of 1.4 million immediately after World War II to a current level of 0.4 million. The decline of the cost of the railroad retirement system (including the social security part) over the long run, reflects the ultimate dying off of the large retired population from the previous high levels of employment and eventual stability to the lower mature population generated by the lower level of employment.

Table 17.—LONGRUN ACTUARIAL COSTS OF WORK-RELATED ENTITLEMENT PROGRAMS

[Percent of payroll]

Year	Social security		Medicare		Civil service		Military		Railroad	
	II-B	III	II-B	III	II-B	III	II-B	III	II-B	III
1983	11.5	11.9	2.6	2.6	32.8	33.0	57.0	57.4	48.9	49.6
1990	11.5	12.7	3.3	4.0	36.1	38.5	58.6	61.9	50.7	54.9
2000	11.0	12.8	5.3	NA	35.7	39.4	59.8	62.9	37.9	43.5
2010	11.4	13.9	7.2	NA	36.4	41.7	57.7	60.6	31.5	34.0
2020	14.2	18.0	8.8	NA	37.1	43.4	54.1	56.5	29.0	32.3
2050	16.6	26.8	11.2	NA	36.3	42.9	51.8	53.6	22.3	25.5

Source: Estimates from agency actuaries and Hay Associates using social security II-B and III assumptions. Calculated as percent of payroll with pay-as-you-go financing.

(B) Financing Problems in the Long Run

Longrun financing problems differ from program to program, and these problems are discussed at length in the program chapters following this overview. Even if agreement can be reached on what constitutes a longrun financial problem in a pay-as-you-go entitlement program, correcting longrun financing imbalances lacks decisionmaking pressures associated with establishment of budget priorities.

Civil service retirement and military retirement have no trust fund shortages looming in the long run. If these two systems can be said to have longrun financing problems, it is because (1) they are perceived as too generous compared to private sector counterparts, (2) they do not meet employers' requirements for helping to attract and maintain an appropriate work force, and (3) they are not properly integrated with the Nation's basic social insurance system.

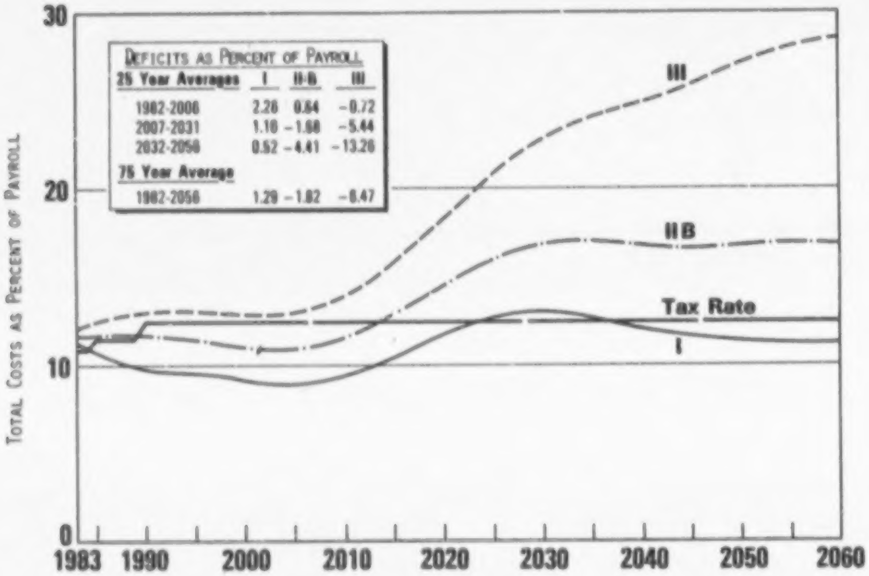
Railroad retirement would seem to have *no* longrun financing problem since its normal cost is relatively low, and since the most serious imbalance of retirees in relation to employees has already passed.

Social security and medicare do have serious longrun trust fund shortages looming, for medicare beginning in the early 1990's and for social security when the baby boom generation begins retiring in about 30 years. The extent of medicare's longrun problem will depend on the future rates of growth of hospital costs, and solutions will require getting these cost increases under control.

Chart 1 shows social security's longrun cost compared to the current law tax rate. It indicates a substantial longrun deficit under both alternatives II-B and III. Using the more pessimistic III assumptions, the trust fund deficit alone during 2032 to 2056, the final 25 years of the 75-year valuation period, would be greater than the current taxes. In order to pay benefits for that 25-year period, social security's current tax rate would have to be more than doubled.

CHART 1

LONG RUN OUTLOOK FOR SOCIAL SECURITY



DEFICITS AS PERCENT OF PAYROLL

25 Year Averages	I	II-B	III
1982-2006	2.26	0.64	-0.72
2007-2031	1.10	-1.68	-5.44
2032-2056	0.52	-4.41	-13.26
75 Year Average			
1982-2056	1.29	-1.82	-6.47

Source: 1982 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

Even with the II–B assumptions, the average deficit during the final 25-year period would be 4.41 percent, or 36 percent of the current law tax rate.

In the long run, differences in demographic conditions affect overall costs much more than in the short run, and combine with differences in economic assumptions to show dramatic longrun differences, especially in social security. For example, the longrun average cost for III assumptions are 33 percent higher for social security than calculated with II–B assumptions. This difference shrinks to 12 percent for civil service retirement and 6 percent for military retirement. Social security varies much more with changes in demographic assumptions because virtually the entire population is affected. Thus, it shows a large additional cost when the large baby boom generation retires.

(C) Longrun Costs As a Percent of GNP

The traditional way to express longrun costs for social insurance and pension programs has been as a percent of payroll. Other ways of measuring long-term cost can be used to consider the programs as competing for the limited resources with other national needs. Estimated future costs can be expressed as a percentage of the gross national product (GNP). The advantage of the GNP measure is to show what proportion of total national income will be needed to pay benefits to persons who are no longer expected to work and who are covered by work-related entitlements. The disadvantage of expressing future cost estimates in this way is that it breaks the close tie that should exist between the costs of an individual pension system and the total pay earned in that organization.

The GNP measure of program costs offers insights into the longrun prospects of work-related entitlement programs relative to the total economy needed to support them. As shown in table 18, workrelated entitlement expenditures are projected at 8 percent of GNP in 1983. This ratio increases to 8.9 percent in 1990 and thereafter decreases for a time, reaching 7.7 percent in 2000 and staying at that level for a decade. Starting in 2015, the ratio increases because of the retirement of the baby boom and continued growth in hospital costs which affect the social security and medicare programs. These expenditures as a proportion of GNP reach a high point of 10.2 percent in 2025.

Table 18.—PROJECTED COST OF FIVE WORK-RELATED ENTITLEMENT PROGRAMS

[As percent of GNP]

	Assumptions II-B
1983	8.0
1990	8.9
1995	8.1
2000	7.7
2005	7.8
2010	7.7
2015	8.7
2020	9.4
2025	10.2
2050	10.1

Source: Offices of the Actuary of the Social Security Administration, Health Care Financing Administration, Office of Personnel Management, Department of Defense, and Railroad Retirement Board. To insure completeness and consistency, needed modifications of the data were made by Hay Associates.

(D) Longrun Real Benefit Strategies in Social Security

The cost of social security is projected to grow in the long run not only because more people retire, but because their initial benefits are adjusted for productivity gains and inflation during their work career and their subsequent benefits are adjusted for price inflation.

In 1977, Congress changed the method for determining initial benefits by indexing the benefit formula to rises in average wage levels. The purpose is to assure that each group, or cohort, of future beneficiaries receives benefits that replaces approximately the same percentage of preretirement earnings. This procedure keeps replacement rates, the ratio of benefits to earnings, relatively constant over time, thus maintaining a sort of intergenerational equity. Future workers at any given relative position in the earnings distribution will receive the same proportion of their earnings in benefits as similar workers do today. Because wages are predicted to rise faster than prices in the long run (as they have historically), reflecting rises in productivity, initial benefits will rise in real terms, as future beneficiaries share in the increase in the standard of living.

An implication of this method of adjustment is that workers at any *given level of real earnings* will receive progressively higher benefits through operation of the weighted benefit formula. The formula is designed to replace a higher proportion of earnings for relatively low-income workers. Conversely, relatively high-income workers receive a lower replacement rate. Because the benefit formula is indexed to increases in average wages in the economy, positive real wage growth will give workers who reach retirement in successively later years progressively higher real benefits. It is these escalating real benefits that account for most of the longrun cost increases in social security and most of the additional taxes required to support the program in the next century.

To illustrate, a single worker with average monthly earnings of $1,000 retiring in 1980 received a basic monthly benefit of about $433 in 1980 dollars. Assuming real wage growth, a worker with the same real earnings history retiring in 1995 would receive about $471; one who retires in 2025 would receive about $570; and one who retires in 2045 would receive about $670 (all of the above expressed in 1980 dollars). This continuous increase in real benefits, in short, would mean that the purchasing power of the benefit paid to a minimum wage earner in 2045 would be roughly equal to that of the maximum taxable wage earner in 1979.

The justification for this apparent increase is that a worker who still earns $1,000 per month in 1995 is worse off, *relative to other workers,* than a worker with the same real earnings in 1980, and a worker in 2025 or 2045 with the same real earnings would be much worse off. In other words, such a worker would not have shared in the increase in the standard of living and, *relatively speaking,* would be "poorer" in 1995 or 2045 and would need a greater replacement rate in order to assure more adequate benefits.

The impact of the 1977 decision to stabilize relative replacement rates on longrun OASDI costs and taxes is perhaps best seen in comparison with a different method of adjusting benefits. Under present law, social security taxes are already scheduled to rise to 12.4 percent of covered payroll, but the costs of benefits are expected to rise to 16.8 percent over the period 2032 to 2056. An alternative method of adjusting benefits would be to assure successive generations of retirees who have the same real earnings histories that they will receive the same real benefits (that is, adjusted only for inflation, not for changes in the standard of living). The justification for such a proposal is that, as social security is meant to be a "floor" of protection, there is no real need to increase future purchasing power in real terms. The longrun cost of this alternative, based on Social Security Administration projections, would level off and average only 12.2 percent of payroll through 2053. Real benefits would continue rising, although not as much, and wage replacement rates would decline steadily during the period.

Another potential factor in the longrun financing problems for social security is the projected increase in the retired population compared to the working population in the early 21st century. Between 1980 and 2030, the ratio of the working-age population to the population over age 65 is expected to decline from about 5 to 1 to about 3 to 1. The very large cohort of people born shortly after World War II—the baby boom generation—will start to retire after 2010. Under current projections of declining mortality rates and relatively low current and expected birth rates, this will mean a rapid and sustained increase in the beneficiaries compared to number of workers. It will also strain the social insurance programs.

Challenges confronting the civil service and military pension programs are somewhat different. The relative size of their beneficiary population compared to the working population will peak before social security does, reflecting the large cohorts who entered public service about the time of the Second World War. The high levels of longrun costs under these programs are more directly attributable to (1) their eligibility provisions that permit unusually early retirement with unreduced benefits, (2) full inflation protection, and (3) other factors, than to national demographic changes.

Under the civil service retirement system, any worker with 30 years of service can retire with full benefits at age 55. Benefits are calculated by using the worker's highest 3 consecutive years of Federal earnings, and benefit payments are not affected by subsequent earnings in non-Federal employment. These benefits, moreover, are fully indexed to keep pace with increases in the cost of living, as measured by the CPI.

In contrast, private sector pension plans typically provide only actuarially reduced benefits as early as age 55, with benefits based on either a flat rate per year of service or earnings averaged over 5 or more years. Virtually no private pension benefits are fully indexed to keep pace with inflation. Thus, in comparison with the civil service retirement, private plans contain incentives to work longer rather than to retire early.

EVALUATING ENTITLEMENT BENEFITS: MEASURING ADEQUACY AND EQUITY

The increases in costs of work-related entitlement programs are of pressing importance at this time. But in the long run, comparable consideration should be given to the benefits provided by entitlement programs. The adequacy and equity of benefits should weigh heavily in deciding whether rising costs should be met by increasing revenues or reducing benefits. Moreover, to build and hold public support for work-related entitlement programs, and the taxation needed to fund them, it is crucial that benefits generally be perceived as fair.

The benefits provided by social insurance and public pension programs have been steadily increasing in dollar amounts and can be expected to continue increasing in the future. Since incomes and prices also have been and are expected to continue increasing, some standards other than absolute dollar amounts are needed to evaluate the benefits provided by the programs under review.

Retirees are not a homogeneous group. Their differences complicate applications of equity and adequacy standards. At least three distinctions among persons age 65 or older deserve special attention.

First, women, on average, are more long-lived than men, and thus the ratio of women to men increases with advancing age. Since the population as a whole is increasing in age, retirement issues are increasingly likely to focus on income deficiencies some women face in their later years.

Second, there are wide variations in both the levels of retirement incomes and in the sources of those incomes. Among persons age 65 or older, for example, black persons have lower incomes and fewer sources of income than white persons, women have lower incomes and fewer sources than men, persons over age 75 have lower incomes and fewer sources than persons age 65 to 74, and single persons have lower incomes and fewer sources than married persons. These variations mean that aggregate data on persons age 65 or over measuring incidence of poverty may obscure severe problems confronting some retirees.[9]

Labor force participation among persons age 65 or older has declined over the past 50 years. Although some data suggest that this decline has abated, a definitive pattern has not emerged. The work decline of older people means that in the future more people will be totally dependent on their retirement income. Public and private provisions for retirement incomes will become, therefore, an increasingly important issue. Adequacy and equity of the benefits provided by work-related entitlement programs in the long run are important in evaluating the financial performance of these programs.

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[9] The income of persons age 65 or older are discussed in more detail in appendix A, p. 457.

Third, evaluation of benefit adequacy must take into account the somewhat different purposes of social insurance and pension programs. Social insurance programs are intended to partially replace lost earnings when a covered worker retires, becomes disabled, or dies. Most workers, especially those who worked at higher wages, will supplement their social insurance benefits with private resources. Social insurance benefits are intended only to provide a floor of protection or a reasonably satisfactory minimum standard of living for the great majority of recipients.

In contrast, the pension programs in this analysis reflect a variety of organizational objectives. As staff retirement pension plans, they are designed to help recruit career-oriented workers, to retain current workers through the peak of their productive years, to keep appointment and promotion opportunities open, to ease adjustments in the size and composition of the work force, and to provide an adequate income in retirement. As a result, pension benefits provided by these plans tend to be more substantial than social insurance benefits.

(A) Equity of Program Benefits

Program equity, as a concept, is often considered in tax policy and in analyzing such programs as welfare and social security. While equity has been less often applied to Federal pension programs, it is relevant to this study. Equity requires that individuals in similar circumstances be treated the same. However, another equity measure is sometimes applied to social security: the rate of return one can expect if his contributions are treated as investments. This is sometimes phrased as getting one's "money's worth" from social security.

Criticisms of inequity are often made of social security. Individuals in equal circumstances are not always treated equally. Without getting into technical definitions of equity, some of the features of the programs that have led to claims of inequity are discussed below.

The current "tilt" in the social security formula returns proportionately more in social security benefits to low earners. Moreover, a worker with a dependent spouse receives one and one-half times more in benefits than a single individual does, even if they both have exactly the same earnings record and thus exactly the same amount of taxes. An even more important consideration than whether or not these features represent "inequitable" treatment is whether or not they should be changed even if they do. These features were designed to meet certain social adequacy goals of a major social insurance program; to change them would reduce the benefits to the lower income sector of the population, and to dependent spouses, often women with little or no work history.

The issues surrounding the rate of return or "money's worth" argument are equally controversial.[10] Any analysis of this question will rest heavily on whether or not the employers' contributions are counted along with the employee's contributions and on the proper interest rate used to assess the value of contributions. In general, it can be said that for all retirees to date, the rate of return has been very high, even when they have paid payroll taxes for a number of years. The average earner retiring in 1982 will receive back in benefits the value of his contributions, even if he has contributed from the beginning of the program, with interest and including employer payments in about 6 years.

For the future, however, the picture clouds. Whether or not workers will receive their money's worth in the future will depend on their level of earnings, presence of a dependent spouse, and the extent of economic growth in the country as a whole. Moreover, some would argue that such individual comparisons are irrelevant since the system is a social insurance program that has societal objectives rather than only individualistic ones. It should be noted that any action to reduce the longrun social security financing deficit, by cutting benefits or increasing payroll taxes, will reduce the rate of return.

Although this discussion of rate of return has focused on social security, the same issues are raised for any defined benefit plan.

Equity issues in pension programs have been raised by some who claim that insufficient benefits go to low-income individuals and to women. In general, pension programs, as well as social insurance, provide adequate retirement income for those with a long, steady work history. Until recently, women and low-income individuals have had difficulty in attaining either a long or steady work history. The civil service retirement program, in particular, handsomely rewards those who stay through a full career with the Federal Government. Those who leave early are faced with the choice of withdrawing their own contributions, only a fraction of the value of benefits earned if they stayed in, or having their earned retirement credits severely eroded by inflation until the age of eligibility.

(B) Benefit Adequacy

The replacement rate—the ratio of program benefits to prior earnings—is often used as a measure of benefit adequacy. The numerator of the replacement rate is usually some measure of a worker's (family's) income after retirement, and the denominator is some measure of the worker's (family's) earnings before retirement.

Because of the great diversity in earnings patterns over individual lifetimes, specifications of the denominator must reflect a measure of "well-offness" consistent with the intent of the system. Because earnings are often erratic during the final work years, and because the final year may be atypical, an average of several years of earnings preceding retirement is often used as a measure of preretirement earnings (such as the highest 3 or 5 consecutive years' average earnings). Because lifetime earnings streams differ markedly between individuals, preretirement earnings are not representative of lifetime earnings positions. Thus, if a lifetime concept of the replacement base is desired, earnings must be averaged over many years.

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[10] Chapter III of this report includes a comprehensive analysis of the "money's worth" issue.

A number of researchers have made estimates of the replacement rate necessary to maintain living standards in retirement. Most agree that retirees need less than 100 percent of gross earnings replacement to maintain their standard of living. While no precise earnings replacement objectives have been established as a matter of national policy, researchers generally agree that individuals need between 60 and 80 percent of *gross* preretirement earnings to maintain preretirement living standards—with rates at the higher level more appropriate for lower income individuals.

President Carter's Commission on Pension Policy estimated the percentage of gross preretirement income that would need to be replaced for workers at different income levels to maintain their preretirement standard of living. After making adjustments for changes in tax liability, work-related expenses, savings, and investments, the Commission estimated that replacement rates ranging from 51 percent to 86 percent would provide retirees the same standard of living as before retirement in 1980. As shown below, the needed replacement rates vary depending upon income and living arrangements.

Table 19.—GROSS RETIREMENT INCOME REPLACEMENT RATE NEEDED TO MAINTAIN PRERETIREMENT STANDARD OF LIVING—1980

[In percent]

Gross preretirement income	Single person	Married person
$6,500	0.79	0.86
$10,500	.73	.78
$15,000	.66	.71
$20,000	.61	.66
$30,000	.58	.60
$50,000	.51	.55

Source: U.S. President's Commission on Pension Policy. "Coming of Age: Toward a National Retirement Income Policy." Feb. 26, 1981. Washington, 1981. pp. 42–43.

The Commission estimates indicate that a 7- to 9-percent increase in retirement income is needed to cover the difference in expenses between single and married households. The choice of survivor annuities, however, in the CSRS actually reduces the retirement income replacement rate, while social security benefits, on the other hand, are increased by 50 percent for married couples. As a result, employees covered by a pension plan and social security receive more if married than if single.

Net earnings replacement rates permit a better comparison between pre- and post-retirement income. Differences in tax liability before and after retirement and reduction of work-related expenses such as Federal Insurance Contribution Act (FICA) payroll deductions, transportation, clothing, and meals purchased away from home are taken into consideration. In addition, differences in discretionary consumption and savings, and possible reductions in living expenses in later life (resulting from lower home financing, educational expenses for children, and health care), influence living standards.

The following tables (20–22) provide some rough calculations of replacement rates for hypothetical workers receiving benefits from different pension systems. Since tax treatment varies substantially before and after age 65, replacement rates are shown *after* taxes. This approach is compatible with the discussions of the President's Commission on Pension Policy. Replacement rates were calculated for both a "low income" worker (final salary of $16,300 in 1982 dollars) and a high-income worker (final salary of $53,900). Since social security has provisions for dependent spouses, replacement rates are shown for both single workers and workers with dependent spouses. These rates are for the year immediately after retirement and for the same workers 15 years later at age 80. The extent of cost-of-living indexation of benefits and tax treatment varies from program to program. Without cost-of-living protection, the value of benefits in real terms declines. These examples assume workers with work histories of 40 years who retire and receive benefits at age 65, as well as those who retire at age 55 with 30 years of work.

When the replacement rates are higher than 100 percent, the after-tax income of the retiree is actually greater than before retirement. This is true for lower income workers with dependent spouses because social security provides this extra amount for dependent spouses and social security enters into the picture in all programs (except civil service retirement). Social security by itself does not reach the 100-percent level although it comes close for low-income workers with a spouse. This underscores the notion that social security should not be looked upon as the sole source of retirement income. And, indeed, of families with a person over age 65, only 12.6 percent show income from social security as the only source. On the other hand, for 31 percent of families with a person age 65 or older, social security is 50 percent or more of their income. Social security represents 50 percent or more of income for 57 percent of single individuals age 65 or older.

As table 20 shows, all programs (except social security by itself), provide very high replacement rates for individuals with long, consistent work histories. This analysis suggests that the pension and social insurance system provides adequate benefits for those with a long and consistent attachment to the work force, whether they have low or high income.

Table 20.—AFTER TAX REPLACEMENT RATES (AGE 65 WITH 40 YEARS OF WORK)

	Low earner		Higher earner	
	Single	Married	Single	Married
Civil service retirement (no social security)	94.6	82.5	118.7	98.1
Military retirement	106.3	127.8	89.6	92.0
Railroad retirement	84.7	119.5	64.8	86.9
Social security plus private pension	102.4	117.2	94.4	92.0

NOTE.—These calculations are based on a common set of work histories and earnings records. They were patterned after salaries of Federal workers. The low-income worker had a final salary of $16,300 and the high earner a final salary of $53,900. Civil service retirement benefits are not taxed until the amount of employee contributions has been paid back. Ordinarily this occurs after 1 or 2 years. Thus, replacement rates shown here are higher than they would be 1 or 2 years hence.

Source: Congressional Research Service.

In general, the programs considered in this analysis provide after-tax income replacement at a level fairly close to the level of income before retirement whether high or low. Except for civil service retirement, the programs shown in table 20 all include a combination of social security and another type of pension. Married couples receive substantially higher replacement rates as a result of social security's provision of benefits to dependent spouses based solely on the earnings record of the working spouse.

The effect of social security is also seen in the difference between high- and low-income workers. Social security's benefit formula "tilt" shows up as higher income replacement in the low-income workers, except for civil service retirement which has no social security component. High-income earners under civil service retirement actually receive higher income replacement than do low-income workers in the first 1 or 2 years of retirement because the difference in tax treatment makes a bigger difference between preretirement and postretirement earnings. After the first 1 or 2 years, the situation is reversed.

Of the examples considered here, military retirement and civil service retirement have their benefits fully indexed to changes in the cost of living. Thus, 15 years after retirement, their benefits have maintained the same relationship to preretirement earnings as they had upon retirement. (See table 21.) For the railroad retirement and private pensions, however, only the social security component is fully indexed. Nearly all private pensions and the private pension counterpart in railroad retirement are not fully indexed, and thus over time the size of the retirement benefit in relation to preretirement income shrinks. This reduction would amount to about one-third in 15 years for high-income railroad retirement and private pension beneficiaries. For lower income recipients, whose overall benefits include a relatively larger social security component, the shrinkage is less, about one-sixth for railroad retirement and one-fourth for private pensions. Military retirement and civil service retirement suffer no diminution at all, since their benefits are fully indexed. The replacement rates for civil service retirement, however, do differ at ages 65 and 80. Civil service retirement benefits are taxable but are not taxed until the amount of employee contributions has been paid back, ordinarily a period of 1 or 2 years. Thus replacement rates shown are higher at age 65 than at age 80.

Table 21.—AFTER-TAX REPLACEMENT RATES (SINGLE WORKER)

	At age 65		At age 80	
	Low earner	Higher earner	Low earner	Higher earner
Civil service retirement	94.6	118.7	82.7	88.8
Military retirement	106.3	89.6	106.3	89.6
Railroad retirement	84.7	68.8	72.6	50.3
Social security plus private pension	102.4	94.4	82.5	71.3

Source: Congressional Research Service. See note on table 20.

The difference in early retirement provisions is highlighted in table 22. Civil service retirement and military retirement, both of which allow early retirement with unreduced benefits, show high replacement rates even with early retirement. (The hypothetical private pension plan included in these examples for comparision purposes permitted retirement at age 55, but with substantially reduced benefits. Since social security benefits do not start until at least age 62, at age 55 this shows only the effect of the private pension.) By age 80, the private pension and military retirement recipients have begun receiving social security in addition to their other pension, thus boosting their overall replacement rates.

Table 22.—AFTER-TAX REPLACEMENT RATES (AGE 55 WITH 30 YEARS OF WORK)

	Age 55		Age 80	
	Higher earner	Low earner	Higher earner	Low earner
Civil service retirement	68.3	83.6	60.2	60.8
Military retirement	65.0	74.3	104.6	95.6
Private pension plus social security	16.3	29.8	42.8	29.8

Source: Congressional Research Service. See note on table 20.

(C) Value of Benefits

Over a lifetime of work, an individual accrues rights to a stream of benefits to be received upon retirement and continuing until death. This stream of benefits can be thought of as an asset whose value can be calculated. The asset value is the sum of the present value of the future stream of benefits, plus the compounded value of benefits already received from programs permitting early retirement.

Table 23 displays these asset values for workers retiring at age 65 with 40 years of work and a final income of about $42,600 in 1982 dollars (salary of the "middle" income Federal worker, GS-13, used in this example for all programs). Considering only future pension benefits at age 65, the value of these benefits is roughly the same for civil service retirement, military retirement, and private pension plus social security—between $400,000 and $500,000. These are substantially above social security by itself, at $120,000—driving home the point once again that social security should not be thought of as sufficient retirement income by itself. The railroad retirement private pension component is less generous than the other programs considered for these medium-income workers. The value of the benefit to the hypothetical railroad retiree would be $260,000.

Table 23.—VALUE BENEFITS AT AGE 65 [AFTER 40 YEARS OF WORK ON FINAL EARNINGS OF $42,600]

Social security	$120,000
Private pension plus social security:	
Social security	120,000
Pension	290,000
Total	410,000
Railroad retirement:	
Social security	120,000
Pension	140,000
Total	260,000
Civil service retirement	500,000
Military retirement (20 years military plus 20 years private sector):	
Social security	120,000
Military pension (future)	320,000
Military pension (past)	670,000
Total	1,110,000
Civil service retirement (30 years civil service plus 10 years private sector):	
Social security	70,000
Private pension	80,000
Civil service retirement (future)	300,000
Civil service retirement (past)	220,000
Total	670,000

Source: Hay Associates.

The variation in total program benefits is seen most dramatically for programs permitting early retirement benefits. For the military retiree, benefits have been received for 20 years, compounding to yield an amount which when combined with the future annuity amount is over $1 million. Early retirement benefits in civil service retirement are added to future annuities in the same way, except that it would only be for 10 years. The combination of compounded payments to age 65 together with the present value of future benefis would total approximately $670,000 for civil service. These past benefit payments add greatly to the overall asset values and explain why these two programs are more expensive than the others as a percent of payroll.

OPTIONS FOR CHANGE

This report discusses options for changing work-related entitlement programs both briefly and in considerable detail. Chapter I (Summary and Conclusions) provides a brief review of generic options and their general effects. In addition, each chapter on the five individual entitlement programs analyzes in depth the major options for improving program financing. The need for change is discussed and so is the rationale for each option. Positions and arguments of groups supporting as well as opposing changes are examined in the program chapters which follow.

SUMMARY

The problems of paying for social security, medicare, civil service retirement, military retirement, and railroad retirement present Congress with a dilemma. With annual Federal budget deficits of $200 billion and possibly more projected for the next several years, levels considered unacceptably high by many experts, the Congress will be under pressure to reduce spending in all programs. The five work-related entitlement programs constitute one-third of the total budget and most deficit-reducing proposals include reductions even in these sensitive programs. However, program benefits are considered "earned" rights by recipients and workers and have proved resistant to reductions. Accrued rights to these entitlement benefits, established in authorizing legislation, are based on work histories and earnings records developed over a working career. If Congress reduces accrued commitments, either for people on the benefit rolls or for active workers, it devalues these commitments, in certain respects, retroactively.

Though politically difficult to do, Congress can change accrued entitlement commitments by amending the underlying statute which sets forth the conditions for receiving the entitlement. This differs from the case of private contracts which are generally legally enforceable according to their terms by either party. While individuals can sue to insure receipt of benefits under the existing statutes, suits to prevent Congress from changing the law to diminish accrued entitlements have not been successful. Entitlement commitments, established by the Congress, are statutory rights only, not contract rights; thus, Congress retains the power to modify the statutory provisions granting entitlement benefits at any time, subject to certain constitutional limitations. The commitment not to reduce these commitments by statutory change is a political, not a legal one.

Pressures to reduce benefits from work-related entitlements develop as Congress struggles to curtail increases in Federal outlays, to reduce budget deficits, and to shore up shortfalls in some trust fund balances. Expenditures for entitlement benefits are part of Federal outlays, a part which has grown rapidly over the past three decades. Furthermore, these expenditures are projected to continue growing in the future, although under II-B assumptions they will decline slightly as a percent of gross national product (GNP) for the 25-year period 1990–2015. Work-related entitlements make up one-third of the budget, and in the final analysis it is primarily their size, not problems with trust fund shortages, that constitutes their financing problems. Even though the cost as a percent of GNP is not growing at present, their absolute size will continue to grow, putting continuing pressure on the budget.

Congress' dilemma is worsened by public confusion and misunderstanding about the way we now pay for work-related entitlement programs. Four of the five work-related entitlement programs are financed through trust funds and there is a general, but mistaken, perception that the economic and budgetary effects of these Government trust funds are analogous to trust funds used to finance pensions in the private sector. For private pension plans, accrued rights to benefits earned from years of work and earnings are legally enforceable rights and the Employee Retirement Income Security Act (ERISA) has established a variety of requirements governing the accumulation and investment of reserves. Eventually, private plans should have sufficient funds to be set aside so that at the time of retirement the fund will be large enough to pay the benefits accrued. Thus, benefits will not have to be paid out of current operating revenues.

Although similar in appearance, Federal Government trust funds do not and cannot in themselves insure availability of funds to pay *future* entitlement benefits. The goal of Federal fiscal policy is to appropriately balance the amount of revenues brought into the Federal Government from all sources, including payroll taxes and employee contributions for work-related entitlements, against the total amount paid out of the Federal Treasury for benefit payments and all other Federal expenditures. A principal concern of fiscal policy is the effect of overall revenues and expenditures, and any deficit or surplus, on the economy. From this prespective, benefit payments for work-related entitlement programs will affect the economy in much the same way as other expenditures, and the payroll and other earmarked taxes will be viewed as an overall source of revenue rather than a source of revenue for a particular purpose. In this context, the trust funds for those programs function largely as a mechanism to insure sufficient funds for making benefit payments on time without the need for annual appropriations.

While this analysis emphasizes the economic and budgetary effects of financing work-related entitlements through trust funds, it is recognized that this emphasis ignores some features of and distinctions among trust funds which often weigh importantly in congressional policy concerning program financing. For example, a trust fund shortfall puts pressure on Congress to cut benefits. On the other hand, substantial social security trust fund balances in the past have made it easier for Congress to raise benefits.

The social security trust fund, in contrast to the civil service retirement fund, receives almost all revenues from special earmarked payroll taxes whose only purpose is to pay social security benefits. The special earmarking of these trust fund revenues may strengthen the political commitment to maintain payments as long as trust fund balances are positive.

Furthermore, concentrating solely on the economic and budgetary effects may overlook the fiscal discipline built into the financing mechanisms of social security. The costs of increasing program benefits (or even maintaining current levels) must be matched with the necessary taxes to pay for them. If trust fund shortages occur, explicit action by the Congress is required to cut benefits or to increase taxes.

In addition, while the present funding basis for civil service retirement may not fully reflect its budgetary effects, it may be desirable psychologically and, to a considerable extent, actuarially. It makes the public and the covered employees more aware of the longrun costs of the system than if the Federal Government merely paid, each year, the excess of the outgo over the employee contributions.

All trust fund assets consist of the Federal Government's own securities which are, in effect, I O U's the Government has written to itself. Under current law, benefits can be paid only if there are trust fund balances. However, regardless of the size of trust funds, benefit payments can be made only from funds available in a specific year—whether they come from taxes, other revenues, or money borrowed from the public. This is what is meant by a pay-as-you-go financing system: benefits are paid by the current generation of workers and tax-payers to the current generation of retirees. Measured by economic and budgetary effects, Federal Government work-related entitlement programs, whether they have trust funds or not, are de facto pay-as-you-go.

The total size of obligations for benefit payments does not depend on whether or not program benefits are paid through a trust fund. It depends instead on the eligibility and benefit rules set up in the program's authorizing legislation. For instance, the entitlement to military retirement benefits is no more or less binding than the entitlement to civil service retirement benefits although the military retirement system has no trust fund at all while the civil service retirement system has a relatively large and growing trust fund. The legal requirement to pay beneficiaries their legally specified amount at the legally specified time does not depend on the existence or nonexistence of a trust fund. And, the entitlement to benefits in both programs is established by legislation and can be changed for both programs by subsequent legislation.

In times when social security payroll tax revenues exceed benefit payments (as was the case from 1940 to 1970 and has been projected to happen again starting in 1990 and continuing for the following 20 to 25 years), the social security system is, from one perspective, "lending" money to the general treasury of ~~the~~ Federal Government. From this perspective, when benefit payments exceed payroll tax revenues (as was the case during the 1970's and 1980's and is projected to be the case again after 2010 to 2015), the Federal Government would be repaying its "loan" to the social security system. For example, if the projections for payroll taxes to exceed benefit payments during the 1990 to 2015 period are realized, the social security trust fund will grow, reaching an asset level of $700 billion (in 1982 dollars) by 2015. In 1 year alone, 2010, social security payroll tax revenues are projected to exceed expenditures by

$58 billion (1982 dollars). However, during these 25 years, these "excess" payroll tax funds will have reduced the Federal Government's need to raise revenues from other sources, reduced the Government's need to borrow from the public, or reduced holdings of Government securities by the private sector thus lowering its interest costs. Presumably, the goal of overall fiscal and monetary policy during this period will produce Federal Government revenues and expenditures in the proper balance to support the strongest possible economic activity. In this sense, when payroll tax revenues exceed benefit payments, the extra dollars are indeed used to finance other activities of the Government.

The converse is true when benefit payments exceed payroll tax revenues as they are expected to under some economic and demographic assumptions, starting in 2010 to 2015. Thus, even with a $700 billion trust fund, the first year that benefit payments exceed payroll taxes, the Federal deficit will increase and the Government will have to raise other taxes, reduce other expenditures, or borrow from the public, which would have the effect of reducing trust fund assets and thus repaying part of the loan to the general treasury. If taxpayers in 2010 decide that they do not want to pay higher taxes or loan more money to the Government, benefits could be cut by statutory changes, regardless of the $700 billion in trust fund I O U's. A major concern of policymakers will be the overall relationship between Government revenues from all sources compared to overall outlays, and the effect of this fiscal policy on the economy. On the other hand, it does seem likely that existence of a large trust fund would make social security and other programs with special earmarked sources of revenues politically more difficult to cut than would be the case with trust fund shortages.

In the civil service retirement and military retirement programs, the Federal Government is not only the payer of benefits, but the employer as well. Trust funds become even less significant when applied to such programs. Military retirement has no trust fund at all and payments are simply made each year from general fund appropriations. This procedure does not prevent the calculation of total benefit obligation—nearly one-half trillion dollars. If the military retirement system ceased enrolling new members today, payment of accrued entitlement benefits would have to be made, subject to subsequent changes in law, until the last beneficiary was removed from the rolls.

The civil service retirement system does have a trust fund, but calculation of the total amount of the Government's accrued obligation for civil service retirement is similar to that of military retirement. However, its financing arrangements are substantially different. Only part of the total obligation is "unfunded" in an actuarial sense, with the remainder being funded (on the books of the Federal Government) by assets held by the civil service retirement trust fund. As long as the trust fund assets are invested in the Government's own securities, adding to these assets does not constitute budget outlays, and conversely does not prefund retirement benefits.

Any trust fund size or buildup has no effect by itself on Federal outlays or deficits now or in the future. These are determined by the benefit obligations to which workers and retirees become entitled—the same as in the military retirement system. Measures taken by the Government as employer to prefund result in I O U's the Government writes to itself. The entitlement obligation to make payments follows from the provisions of the benefit formula, not from trust fund balances. The civil service retirement and the military retirement program could be fully funded on the books of the Government without changing the size of Government outlays or the Federal deficit in any way.

The civil service retirement system financing procedures have confused many. A commonly held view is that pensions should be fully paid for by employees and employers. However, as long as the Government as employer invests trust fund assets in its own securities, the idea of prefunding has little economic or budgetary meaning. Furthermore, in a pay-as-you-go system, increasing the amount of employee contributions would simply result in making Federal workers pay more of the cost of benefits to retired employees rather than having these benefits paid by taxpayers in general.

In summary, benefits from the Government's work-related entitlement programs all count as outlays in the Federal budget, leading to continued pressure to cut the programs back as part of overall pressures to reduce Government spending. The programs are largely financed as de facto pay-as-you-go systems with benefit payments coming from revenues and sales of securities to the public each year. However, program benefits all follow from entitlement commitments accrued over a career of work, and benefit reductions devalue these accrued commitments retroactively. Because entitlement commitments are, in effect, political commitments, political means will be used to protect these entitlement commitments against statutory devaluation.

Retirees and most workers argue that since entitlement rights are accrued over a longtime period, any changes should be phased in gradually. In fact, supporters of work-related entitlement programs argue that changes should be made primarily for longrun structural reasons, and not solely for the purpose of shortrun budget balancing. However, without the pressure of the budget to force consensus and decisions, longrun structural reform is unlikely—particularly if its purpose is to reduce benefits. The difficulty of reaching consensus on the need for program reduction outside the budget process is compounded by disagreement over the appropriateness of congressional action which would not take effect for many years. Projecting the need for longrun changes is made hazardous by unpredictable longrun economic and demographic conditions. With pay-as-you-go financing and benefit obligations which are political rather than legal, the extent to which a current generation of lawmakers should take action which could constrain the options for future Congresses becomes itself a controversial issue.

Appendix

Actuarial Assessment of Federal Retirement Income Systems*

(A) Measures of Financing

INTRODUCTION

The first-time reader of a Government actuarial report is often confused by the concepts used to measure the adequacy and incidence of financing. These actuarial reports include explanations of the meaning and use of each concept so that, with some effort on the reader's part, the concepts become clearer. However, on turning to the next Government report on another system, the reader's confidence quickly evaporates. Some of the concepts seem to be the same but they have new names. And often totally new concepts are introduced. Is the *normal cost* of the civil service retirement (CSR) system the same as the *cost rate* of the social security system? Does the *unfunded liability* of the CSR system have an analogy in the social security system?

The difference in funding concepts used in each report arises largely from emphasis on the appropriate cost measure for each system. In the rest of this chapter, we will try to help readers deal with the complexities of terminology and content of the various reports by (1) discussing the two general funding concepts used in Government actuarial reports, (2) presenting the cost under each of the two concepts for each system, and (3) relating the specific concepts from the individual reports to the two general concepts.

GENERAL CONCEPTS

Programs that offer benefits contingent on survival of employees to a certain age require funding procedures more complex than the 5-year appropriation concept adequate for most Government programs because benefits earned now will be paid over the next 50 to 75 years. Chart A illustrates the benefit cycle for a hypothetical pension system initiated in the early 1980's.

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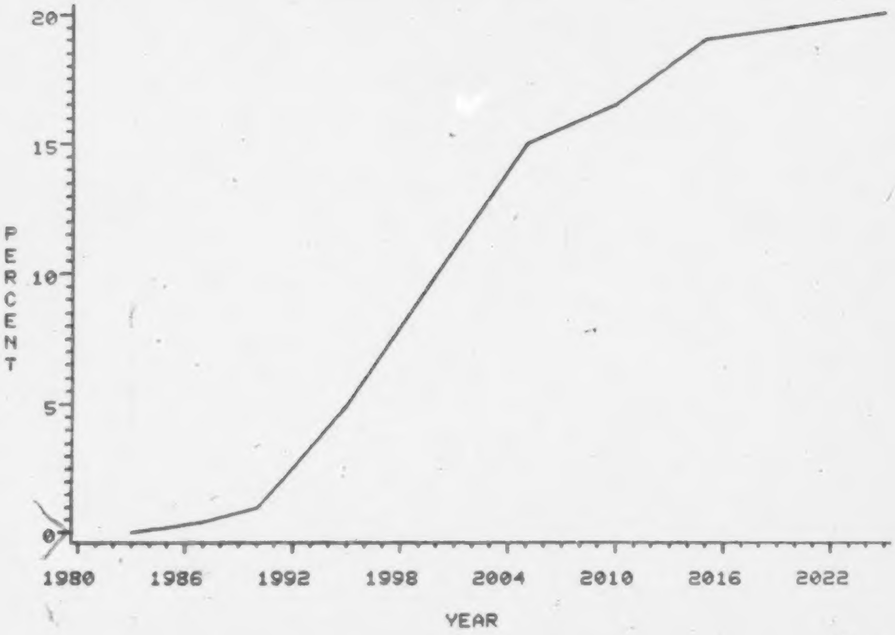
*Prepared by Edwin C. Hustead, F.S.A., Hay Associates.

CHART A

TYPICAL PLAN
BENEFITS AS PERCENT OF COVERED PAYROLL



Most of the benefit costs will be expressed as a percentage of covered payroll. It is necessary to use a relative index to reduce inflated dollar costs to understandable magnitudes. Payroll is the chosen deflator because retirement costs are typically paid and analyzed as a percentage of payroll.

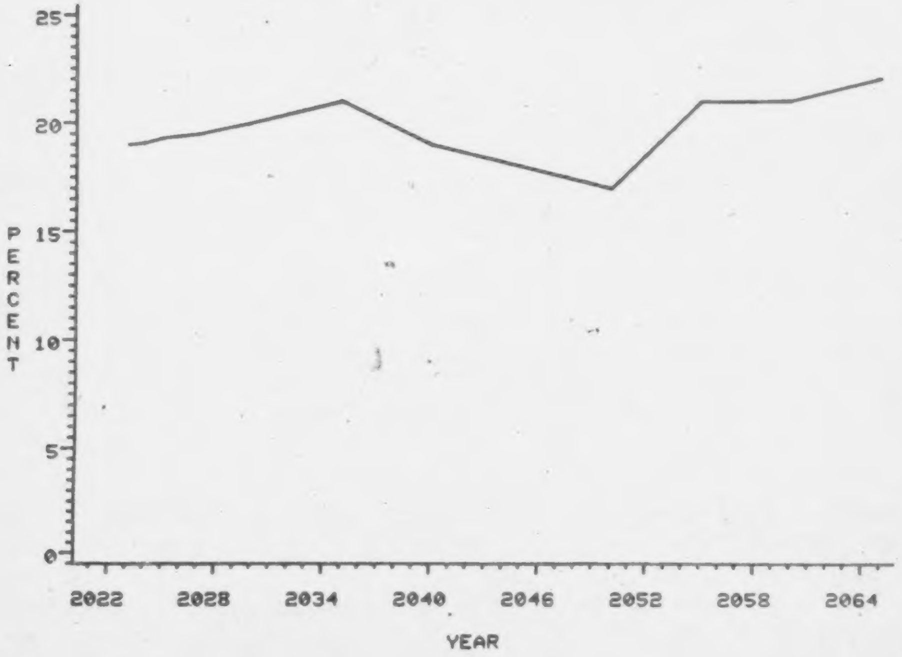
In a typical retirement system, outlays are very small in early years but grow to much higher ultimate benefit levels after the first generation of workers has retired. If a Government staff retirement system were funded by annual appropriations equal to that year's outlays, the Government would eventually encounter high long-term costs which could prove to be an excessive burden on the employees and/or taxpayers of a future generation. Private sector organizations usually avoid this problem by prefunding the ultimate benefit level. A common approach to prefunding in the private sector is to calculate and pay a series of level contributions that, along with interest, fund the future benefits for an employee while the employee is working.

Chart B illustrates the benefit cycle for a mature plan. This could represent the benefit level for the plan in chart A after a generation of workers has passed through the system. If benefits have been inadequately prefunded, the existing fund and contribution levels will be too low. As a result, either part of the future benefits will have to be paid from current income or contributions will have to be increased substantially. The result, for a system without full advance funding, is that the measurement of short-term cash outlays related to income eventually becomes the most critical concern. For several of the Federal systems, in fact, the concern has become so acute that the cash flow must be measured by the month.

CHART B

MATURE PLAN

BENEFITS AS PERCENT OF COVERED PAYROLL



(B) Two Funding Concepts

There are two general approaches that are used to describe and fund a retirement system. One starts with a projection of all future costs, typically as a percent of payroll, for the open group of all current and future employees and annuitants. The *open group* concept means that the valuation recognizes the replacement of current workers by future workers, and those future workers by the next generation, ad infinitum. A series of payments, usually expressed as a percentage of each year's payroll, is established that would pay for the expected stream of benefits with allowance for a small fluctuation reserve.

The second approach is to calculate the cost for only the *closed group* of current employees and annuitants. There are several variations of the closed group approach which prefund the benefits before the current employees retire or die. The cost of prefunding benefits for each new group of employees over its working life is called the *normal cost.* Thus, a common approach to financing a closed group system is the entry-age-normal cost method which is based on financing benefits as a level cost per year (usually a percent of payroll) over the employees' working life. Since the entry-age-normal cost method is used for the Government plans, this discussion will focus on this approach. Other approaches to prefunding shift the burden of financing to earlier or later points in the working life, but they all have the common goal of accumulating funds at retirement or death that will pay for the benefits of each employee group during its working life.

The funding system amortizes the total liabilities, less the current fund and the present value of future normal costs, over a specific number of years in the future. This net cost is the *unfunded liability*. If the employer pays the normal cost and amortizes the existing unfunded liability, the cost for each generation of workers will be funded before the generation retires or dies.

The terms *intergenerational funding* and *advance funding* will be used to describe the two systems. The intergenerational funding approach charges a future generation of workers or employees for the retirement benefits for current workers. The advance funding approach charges the cost of future retirement benefits to workers or employees during the beneficiaries' working life.

USES OF FUNDING CONCEPTS

The Federal Government requires private sector employers to use the advance funding approach for the very good reason that any organization may close down someday. When that happens, the employer should have developed a pension fund sufficient to pay off benefits earned to the date of termination. The Government also provides a mechanism, through the Pension Benefit Guaranty Corporation (PBGC), to guarantee a large part of the accrued benefits. The need to hold down the liabilities of PBGC provides an even stronger incentive for the Government to require a high level of advance funding.

On the other hand, governments in general, and the Federal Government in particular, will not terminate until the Government itself disappears. In that event a guarantee of pensions will be a relatively minor problem. However, there are reasons for a government to at least calculate costs using the advance funding concept. One reason, more pertinent for the retirement systems for Government employees than for the social security system, is to charge taxpayers for the accrued cost of benefits for current workers. A related reason is to avoid taxpayer resistance to unexpectedly high pension costs. Finally, an advance funding measure is often used as a guide even if the advance payments are not made. The advance funding measure is often used to (a) compare the costs of Government and private sector retirement plans, (b) measure total compensation, and (c) determine the real cost of Government employment.

Irrespective of the system used to measure costs, the de facto practice for funding Federal Government retirement systems is the intergenerational approach. The social security/medicare and military retirement systems have been and, for the foreseeable future, will be funded on this basis. The railroad retirement system, once partially advance funded, has evolved to an intergenerational system. The civil service retirement system is partially advance funded on the books of the Government but, because the fund is internal to the budget, in the form of an I O U *to* the Government, *from* the Government, the funding system is, in the final analysis, an intergenerational system.

PRESENTATION OF COSTS

The actuarial valuations of each of the five systems use one of the cost methods as the primary focus. Social security/medicare focuses exclusively on the intergenerational cost method. With its current funding crises, the railroad retirement system has shifted its emphasis from advance funding to intergenerational funding but still reports both bases. The valuations for military and civilian retirement systems focus on advance funding, even though both systems are funded on the intergenerational approach in the Federal budget. For the purpose of comparability, we asked each actuarial office to provide costs on both bases or a standard set of assumptions.

There are various ways of calculating and describing the costs within each of the two major funding methods. For the intergenerational approach, we have selected the unweighted average of 75 years of the cost of benefits as a percent of payroll. This is the long-range measure commonly used for social security. For the advance funding approach, we have selected the entry-age-normal cost with level percentage of payroll financing of the unfunded liability over 40 years. This is a variation commonly applied in the public sector. Most of the other variations would show the same general picture. Table 1 presents costs using the 1982 social security II–B assumptions while table 2 presents the costs using the more pessimistic series III assumptions.

The costs shown for the railroad retirement system are only for the benefits not reimbursed by social security. This is consistent with the presentation used by the railroad retirement actuary and presents the true cost of the benefits for which the system is liable under the law. The RRB fund and benefit projections in other parts of the report, however, show the cost of all benefits paid through the railroad retirement system since the current problem is the potential deficiency of the fund including all items of income and expense. These deficiencies include amounts due the railroad retirement account from social security and from the railroad unemployment insurance account.

Table 1.—MEASURING THE COST OF FEDERAL REPLACEMENT INCOME SYSTEMS

Social Security II-B Assumptions

	Cost on two bases as percent of payroll		
	Intergenerational transfer		Advance funding
Social security	14.1	Normal cost	15.0
		Amortization of liability	8.7
			23.7
Medicare	7.9	NA	
Military	55.1	Normal cost	41.5
		Amortization of liability	50.9
			92.4
Civil service	36.1	Normal cost	30.9
		Amortization of liability	20.8
			51.7
Railroad retirement	14.2	Normal cost	7.0
		Amortization of liability	12.8
			19.8

Table 2.—MEASURING THE COST OF FEDERAL REPLACEMENT INCOME SYSTEMS

Social Security III Assumptions

	Cost on two bases as percent of payroll		
	Intergenerational transfer		Advance funding
Social security	18.7	Normal cost	19.6
		Amortization of liability	9.8
			29.4
Medicare	NA.	NA	
Military	61.8	Normal cost	49.1
		Amortization of liability	58.6
			107.7
Civil service	40.6	Normal cost	36.6
		Amortization of liability	23.9
			60.5

Table 2.—MEASURING THE COST OF FEDERAL REPLACEMENT INCOME SYSTEMS—Continued

	Cost on two bases as percent of payroll		
	Intergenerational transfer		Advance funding
Railroad retirement	15.2	Normal cost	7.6
		Amortization of liability	13.1
			20.7

(C) Glossary of Terms

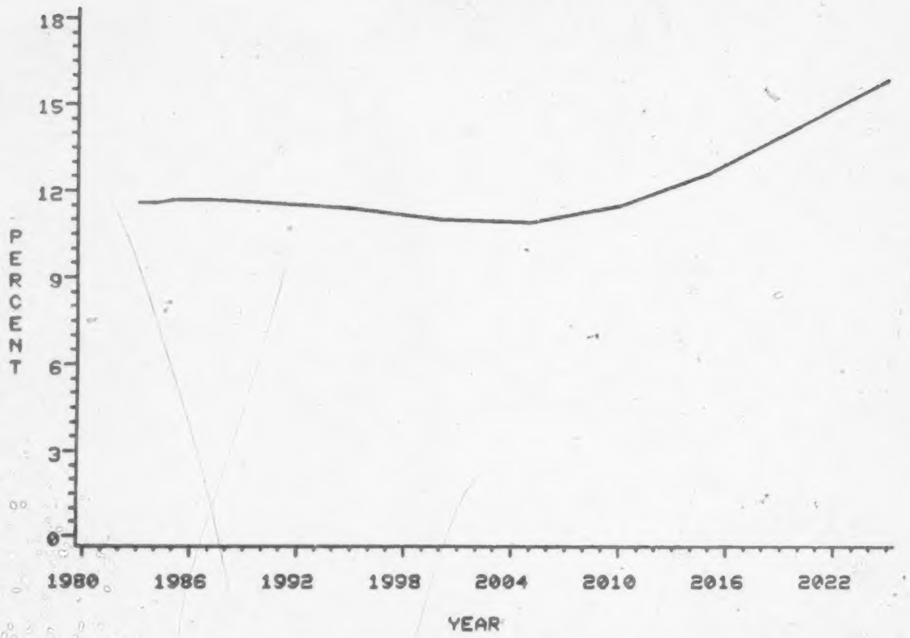
The following sections will explain the funding terms used in each program's actuarial report and relate these to the general funding approaches. The charts show the expected benefits as a percentage of payroll using social security II-B assumptions.

SOCIAL SECURITY SYSTEM

Chart C shows the expected outlays as a percent of taxable payroll. Outlays have reached a plateau that will decline slightly in the next generation and then rise to the ultimate level. All costs in the report are expressed in terms of intergenerational financing. The terms used in the report are:

Cost rate	Outlays as a percent of taxable payroll. This is the line shown in chart C and includes benefit payments, administrative expenses, and net transfers to the railroad retirement system.
Tax rate	Income based on the current schedule of contributions. This includes adjustments, such as the adjustment for self-employment insurance, so that the tax rate can be compared to the cost rate over different periods.
Actuarial balance	The difference between the average tax rate and the average cost rate over a period of years.
Actuarial surplus	A positive actuarial balance.
Actuarial deficit	A negative actuarial balance.
Close actuarial balance.	A surplus or deficit of less than 5 percent of the average cost rate.

CHART C
SOCIAL SECURITY
BENEFITS AS PERCENT OF COVERED PAYROLL



Current cost method...	The concept that each year's total income should be approximately equal to outgo plus the amount needed to build a contingency reserve (i.e., the intergenerational funding method).
Trust fund ratio..........	The assets at the beginning of the year as a percent of the outgo during the year.

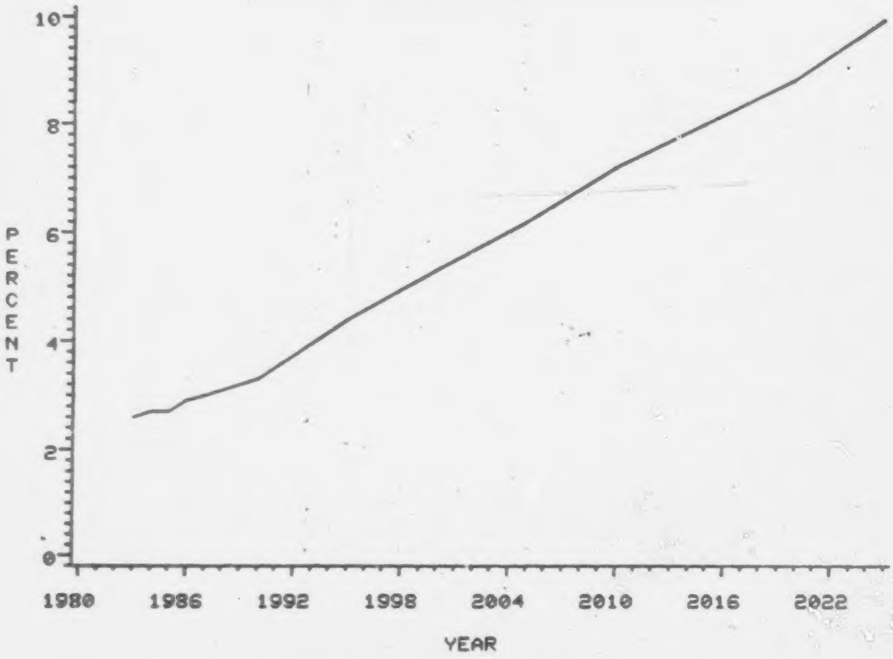
MEDICARE

As with social security, only the intergenerational approach is used in the medicare valuation. Chart D shows outlays on the II–B assumptions. The terms used are similar to those used in the social security report.

Average cost................	Outlays as a percent of taxable payroll for a selected period. Outlays include the loan to social security.
Average tax rate..........	Average of the tax rates based on the current schedules in the law for the corresponding period.

Actuarial balance	The average tax rate less the average cost.

CHART D
MEDICARE
BENEFITS AS PERCENT OF COVERED PAYROLL



MILITARY RETIREMENT SYSTEM

The military retirement system costs are expressed in terms of the advance funding approach. Benefits as a percent of payroll are shown in chart E. Although the terminology is slightly different, the definitions are identical to those used in the civil service retirement system.

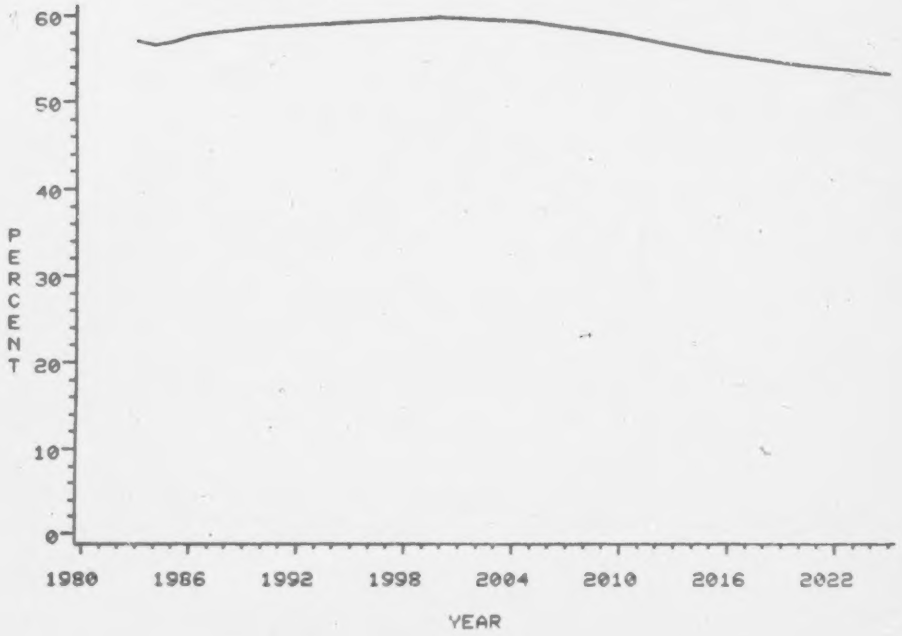
Aggregate entry-age normal cost percentage.	The present value of future benefits for a new entrant group divided by the present value of their future salary.
Pay-as-you-go unfunded liability.	The present value of future benefits for all current active duty and retired personnel and survivors.
Unfunded liability	The present value of future benefits minus the present value of future normal costs for all current active duty and retired personnel.

Actuarial present value of accumulated plan benefits.	The present value of future benefits for all covered active duty personnel based on their past service, plus the present value of all benefits to retired personnel and survivors.

CHART E

MILITARY

BENEFITS AS PERCENT OF COVERED PAYROLL



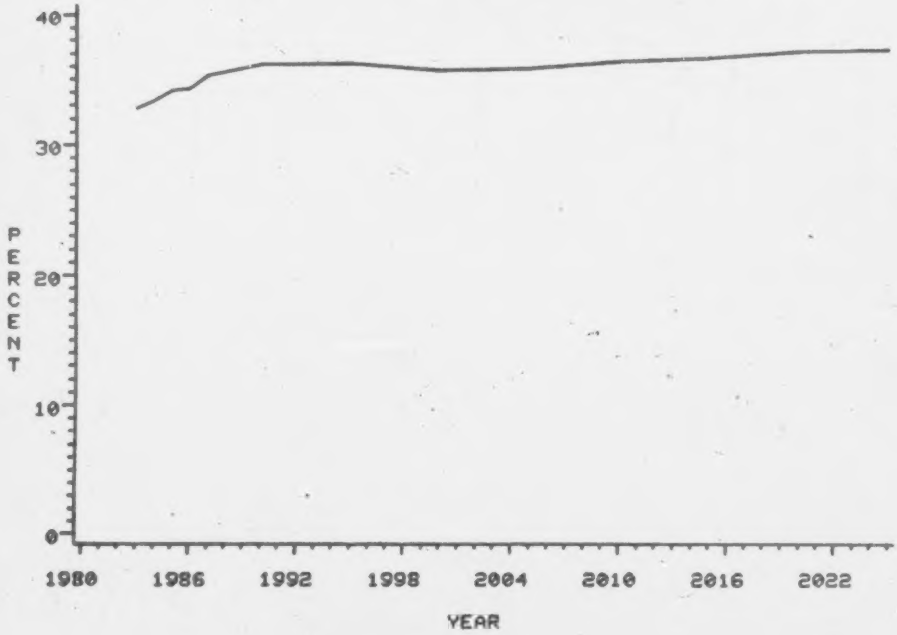
CIVIL SERVICE RETIREMENT SYSTEM

Chart F shows the benefits under the civil service retirement. By 1990, the CSR system will have matured, and benefits, as a percent of payroll, should be fairly level after that time. The civil service retirement valuation shows the costs on the advanced funding basis. Both "static" results, which do not include the effect of inflation, and "dynamic" results, which do anticipate inflation, are reported.

Normal cost..................	The amount needed to fund the benefits for a new group of employees during their working life.
Static unfunded liability.	The static present value of benefits less (a) the present value of scheduled payments and (b) the fund without considering the effect of inflation.

Dynamic unfunded liability.	The present value of benefits less (a) the present value of normal costs and (b) the fund, considering the effect of inflation.

CHART F
CIVIL SERVICE
BENEFITS AS PERCENT OF COVERED PAYROLL



RAILROAD RETIREMENT SYSTEM

Chart G shows railroad retirement system benefits as a percent of tier 1 payroll. The railroad retirement system includes both an advance funding presentation and an analysis of the intergenerational funding cost. The advance funding valuation includes a presentation of costs on both the closed and open group bases. Since the three analyses focus on different cost factors, they are discussed separately. The tier 1 payroll is pay below the social security taxable maximum. The tier 2 payroll is pay below the railroad retirement taxable maximum.

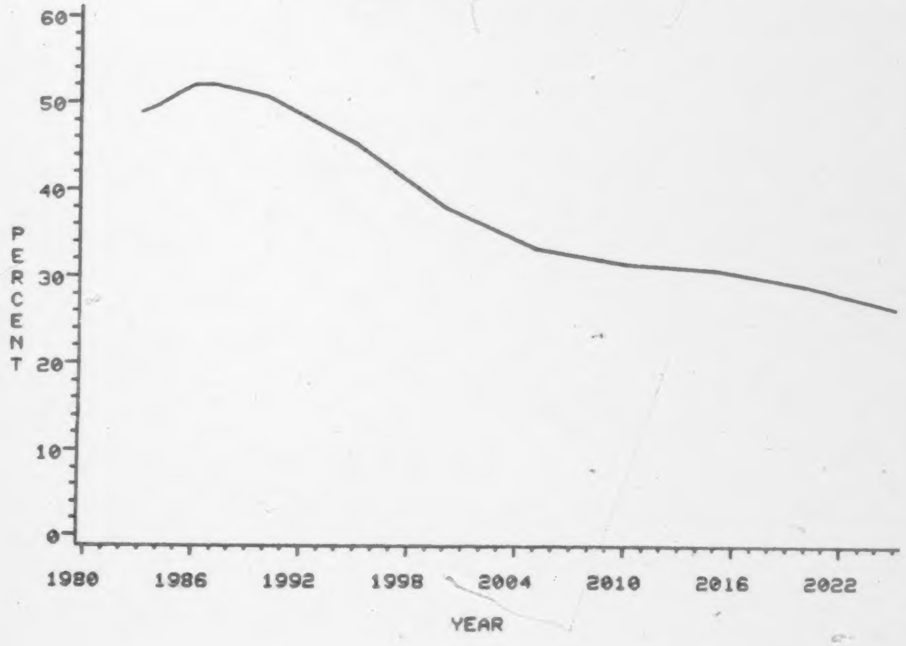
(1) Intergenerational Funding Analysis

Financial interchange.	The payment due from social security determined as the benefits that would have been paid by social security less the contributions that would have been received by social security if the railroad retirement system did not exist.

Fund at end of year.....	The projected fund status including all elements of income and expense. Notably, the fund status includes the amount on loan to the railroad unemployment insurance account as an asset.
Fund low point for year.	The largest deficiency in the fund during the year (usually in April or May) without including the unemployment insurance loan as an asset.
Cash-flow deficiency....	The increase in payroll effective January 1, 1983, needed to keep the fund low point through 1995 below the borrowing authority. The borrowing authority is the level of the current years' financial interchange. If the low point drops below the borrowing authority, benefits will have to be reduced.

CHART G

RAILROAD RETIREMENT
BENEFITS AS PERCENT OF COVERED PAYROLL



(2) Advance Funding—Open Group Basis

Present value of benefits.	The present value of all benefits for the specified group of past, current, and future employees. This includes any benefits that would not have been paid by social security. Thus, the effect of the financial interchange is not considered.
Present value of future taxable payroll.	The present value of tier 2 payroll.
Present value of benefits as a percentage of the present value of future taxable payroll.	The present value of benefits for all past and future employees divided by the present value of their salary.
Actuarial surplus or deficiency.	The present value of tier 2 taxes less the present value of benefits (both as a percent of payroll) for all past and future employees.

(3) Advance Funding—Closed Group Basis

Normal cost as a percentage of payroll.	The present value of benefits for all future entrants divided by the present value of their tier 2 payroll.
Present value of benefits.	Defined as in open group basis.
Present value of future service costs.	The present value of the normal cost times the tier 2 payroll for covered employees.
Unfunded accrued liability.	Present value of benefits for current employees and annuitants less (a) present value of future service costs and (b) the fund.

(D) Projection of Programs—Fund Perspective

Tables 1 through 4 project the mid-range, and long-range costs from the perspective of each fund. The first two tables project results using social security II-B assumptions and the next two show results on the social security III assumptions. Interest is only included if it is positive. It is assumed that steps will be taken to avoid a deficit fund in any system so the actual interest will not be negative. The items included are:

SOCIAL SECURITY

Payroll	Effective contribution base including adjustments for factors such as the self-employment tax.
Income	Employer contributions, employee contributions, direct Government financing and positive interest.
Expense	Benefits, administrative costs, and financial interchange.

MEDICARE

Payroll	Social security payroll plus Federal employee payroll.
Income	Employer contributions, employee contributions, direct Government financing, financial interchange and positive interest.
Expense	Benefits and administrative costs.

MILITARY

Payroll	Basic pay, which is the payroll used for retirement credit.
Expense	Benefits paid.

CIVIL SERVICE

Payroll	Payroll used for retirement credit.
Income	Employer contributions, all Federal contributions and positive interest.
Expense	Benefits and administrative costs.

RAILROAD RETIREMENT

Payroll	Tier 1 payroll.
Income	Employer contributions, employee contributions, financial interchange and positive interest.
Expense	Benefits and administrative costs.

Table 1

Ten-Year Projection - Individual Fund Perspective
(Billions)

Social Security II-B Assumptions

Fiscal Year	Social Security		Medicare		Military		Civil Service		Railroad Retirement	
	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense
1983	$160.0	$171.8	$ 42.7	$ 39.5	$ 0	$ 16.3	$ 35.5	$ 21.8	$ 4.7	$ 5.4
1984	176.2	188.2	47.5	45.0	0	17.5	39.1	24.1	5.1	5.7
1985	200.4	207.5	53.1	50.6	0	18.8	42.2	26.4	5.4	6.1
1986	221.3	226.4	61.2	56.8	0	20.4	45.1	28.9	5.7	6.4
1987	239.2	245.7	67.3	64.7	0	21.9	48.0	31.3	6.0	6.7
1988	260.0	265.3	72.9	73.6	0	23.5	51.1	33.7	6.3	7.1
1989	280.0	285.7	78.0	83.5	0	25.1	54.2	36.1	6.6	7.4
1990	319.9	306.5	83.1	93.1	0	26.7	57.5	38.6	7.2	7.7
1991	350.3	327.1	88.0	105.6	0	28.3	60.7	41.1	7.3	7.9
1992	372.1	347.8	93.2	119.8	0	29.9	64.0	43.6	7.6	8.3

Table 2

Long-Range Projection - Individual Fund Perspective
(Percent of Covered Payroll)

Social Security II-B Assumptions

Fiscal Year	Social Security Income	Social Security Expense	Medicare Income	Medicare Expense	Military Income	Military Expense	Civil Service Income	Civil Service Expense	Railroad Retirement Income	Railroad Retirement Expense
1983	10.8%	11.6%	2.8%	2.6%	0%	57.0%	53.4%	32.8%	42.6%	46.9%
1984	10.8	11.6	2.8	2.7	0	56.6	54.2	33.4	44.3	49.8
1985	11.1	11.7	2.9	2.7	0	56.9	54.6	34.2	45.9	51.0
1986	11.4	11.7	3.0	2.9	0	57.6	54.5	34.3	46.7	52.1
1987	11.4	11.7	3.1	3.0	0	58.0	54.3	35.3	46.6	52.0
1990	12.1	11.6	3.0	3.3	0	58.6	53.7	36.1	47.3	50.7
1995	12.5	11.4	3.0	4.4	0	59.2	52.4	36.2	42.7	45.2
2000	12.9	11.0	3.0	5.3	0	59.8	51.6	35.7	37.6	37.9
2005	13.3	10.9	3.0	6.2	0	59.2	51.8	35.8	33.9	33.3
2010	13.6	11.5	3.0	7.2	0	57.7	52.1	36.4	32.2	31.5
2015	13.8	12.6	3.0	8.0	0	55.7	52.2	36.7	30.8	30.8
2020	13.4	14.2	3.0	8.8	0	54.1	52.2	37.1	29.6	29.0
2025	12.6	15.8	3.0	9.9	0	53.0	51.5	37.2	28.0	26.4
2050	12.4	16.6	3.0	11.2	0	51.8	51.1	36.3	24.8	22.3

Table 3

Ten-Year Projection - Individual Fund Perspective
(Billions)

Social Security III Assumptions

Fiscal Year	Social Security		Medicare		Military		Civil Service		Railroad Retirement	
	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense
1983	$157.8	$172.5	$ 42.1	$ 39.5	$ 0	$ 16.4	$ 35.5	$ 21.9	$ 4.7	$ 5.4
1984	169.9	191.8	46.0	45.2	0	17.7	39.1	24.4	5.1	5.9
1985	197.1	215.8	52.2	52.4	0	19.3	42.6	27.2	5.7	6.4
1986	221.8	241.4	61.1	61.8	0	21.7	46.9	30.8	6.1	6.9
1987	244.0	269.4	68.0	72.2	0	24.0	51.4	34.3	6.6	7.5
1988	270.1	299.0	74.5	85.1	0	26.5	55.8	38.0	7.1	8.0
1989	296.1	330.2	80.6	100.1	0	29.2	60.8	42.1	7.6	8.6
1990	344.7	363.5	86.7	117.0	0	31.8	66.3	46.1	8.3	9.1
1991	384.7	398.1	94.8	136.7	0	34.1	70.1	49.6	8.7	9.6
1992	417.7	434.3	103.7	159.7	0	36.4	75.2	53.5	9.1	10.0

Table 4

Long-Range Projection - Individual Fund Perspective
(Percent of Covered Payroll)

Social Security III Assumptions

Fiscal	Social Security		Medicare		Military		Civil Service		Railroad Retirement	
Year	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense
1983	10.8%	12.0%	2.8%	2.6%	0%	57.4%	53.5%	33.0%	43.0%	49.6%
1984	10.8	12.3	2.8	2.8	0	57.7	54.5	34.0	45.3	51.9
1985	11.1	12.4	2.8	2.8	0	58.3	54.9	35.0	47.3	53.8
1986	11.4	12.5	3.0	3.1	0	59.9	55.2	35.7	47.9	54.9
1987	11.4	12.6	3.3	3.3	0	60.7	55.0	36.9	48.3	55.4
1990	12.1	12.8	3.0	4.0	0	62.7	54.9	38.5	50.0	54.9
1995	12.4	13.0	3.0	N/A	0	63.8	53.8	39.0	46.7	49.9
2000	12.4	12.8	3.0	N/A	0	65.9	53.4	39.4	42.2	43.5
2005	12.4	13.0	3.0	N/A	0	66.6	54.1	40.3	39.0	39.1
2010	12.4	13.9	3.0	N/A	0	66.1	54.8	41.7	35.3	34.8
2015	12.4	15.6	3.0	N/A	0	64.7	55.1	43.0	33.0	34.0
2020	12.4	18.0	3.0	N/A	0	63.4	55.4	43.4	31.8	32.3
2025	12.4	20.5	3.0	N/A	0	62.3	54.8	43.7	30.2	29.8
2050	12.4	26.7	3.0	N/A	0	61.2	54.5	42.9	26.7	25.5

(E) Projection of Programs—Budget Perspective

Since the funds are internal to the budget, many of the transactions cancel each other as intergovernmental transfers in determining the total budget deficit. Tables 5 through 8 show the effect of each of the funds on the Federal budget. Tables 5 and 6 are on II-B assumptions and tables 7 and 8 on III assumptions. Since the intergovernmental aspects have been excluded, the income and expense items can be added to give a total budget perspective. The definition of terms is:

SOCIAL SECURITY

Payroll	Same as fund perspective.
Income	Employer and employee contributions.
Expense	Benefits and administrative costs.

MEDICARE

Payroll	Same as fund perspective.
Income	Fund perspective income less Federal employer contributions.
Expense	Benefits and administrative costs.

MILITARY

All items	Same as fund perspective.

CIVIL SERVICE

Payroll	Same as fund perspective.
Income	Employee contributions.
Expenses	Benefits and administrative costs.

RAILROAD RETIREMENT

Payroll	Same as fund perspective.
Income	Employer and employee contributions.
Expense	Benefits and administrative costs.

TOTAL PROGRAMS

Payroll	To avoid duplication, the following items were added to obtain the total payroll: (a) Social security—total effective payroll. (b) Medicare—included in (a) and (d) so nothing added. (c) Military—only pay in excess of the social security maximum. (d) Civil service—total payroll. (e) Railroad retirement—tier 1 payroll.

Income	Sum of funds.
Expense	Sum of funds.

CONSTRUCTION OF TABLES

The tables and charts shown in this paper were based on information provided by the following sources:

Social security—Social Security Administration.
Medicare—Health Care Financing Administration.
Military retirement system—Department of Defense.
Civil service retirement system—Office of Personnel Management.
Railroad retirement system—Railroad Retirement Board.

In certain cases, the tables needed to be converted (e.g., from calendar year to fiscal year) for consistency. In other cases, the sources were unable to provide projections in the format needed, and tables had to be constructed from the best auxiliary data.

The conversions and constructions were done by Hay Associates.

Table 5

Ten-Year Projection - Federal Budget Perspective
(Billions)

Social Security II-B Assumptions

Fiscal Year	Social Security		Medicare		Military		Civil Service		Railroad Retirement		All Funds	
	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expenses
1983	$158.2	$169.4	$ 38.2	$ 39.5	$ 0	$ 16.3	$ 4.7	$ 21.8	$ 2.9	$ 5.4	$204.0	$252.4
1984	175.4	185.9	42.7	45.0	0	17.5	5.0	24.1	2.9	5.7	226.0	278.2
1985	199.5	204.9	47.9	50.6	0	18.8	5.4	26.4	3.1	6.1	255.9	306.8
1986	220.5	223.8	55.4	56.8	0	20.4	5.8	28.9	3.3	6.4	285.0	336.3
1987	238.5	243.1	61.1	64.7	0	21.9	6.2	31.3	3.4	6.7	309.2	367.7
1988	259.3	262.5	66.4	73.6	0	23.5	6.6	33.7	3.6	7.1	335.9	400.4
1989	279.3	282.7	72.6	83.5	0	25.1	7.1	36.1	3.8	7.4	362.8	434.8
1990	319.3	303.3	77.0	93.1	0	26.7	7.5	38.6	4.2	7.7	408.0	469.4
1991	349.6	323.9	82.8	105.6	0	28.3	8.0	41.1	4.4	7.9	444.8	506.8
1992	371.4	344.6	89.4	119.8	0	29.9	8.4	43.6	4.7	8.3	473.9	546.2

Table 6

Long-Range Projection - Federal Budget Perspective
(Percent of Covered Payroll)

Social Security II-B Assumptions

Fiscal Year	Social Security		Medicare		Military		Civil Service		Railroad Retirement		All Funds	
	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense
1983	10.7%	11.5%	2.5%	2.6%	0%	57.0%	7%	32.8%	25.9%	48.9%	13.2%	16.4%
1984	10.8	11.4	2.5	2.7	0	56.6	7	33.4	25.9	49.8	13.2	16.3
1985	11.3	11.5	2.6	2.9	0	56.9	7	34.2	26.9	51.0	13.5	16.2
1986	11.4	11.6	2.7	2.9	0	57.6	7	34.3	26.6	52.1	14.0	16.5
1987	11.4	11.6	2.7	3.0	0	58.0	7	35.3	26.7	52.0	14.0	16.7
1990	12.1	11.5	2.8	3.3	0	58.6	7	36.1	27.8	50.7	14.8	17.0
1995	12.4	11.3	2.8	4.4	0	59.2	7	36.2	28.2	45.2	15.1	18.8
2000	12.4	11.0	2.8	5.3	0	59.8	7	35.7	27.7	37.9	15.1	18.2
2005	12.4	10.9	2.8	6.2	0	59.2	7	35.8	27.7	33.3	15.1	18.9
2010	12.4	11.4	2.8	7.2	0	57.7	7	36.4	27.7	31.5	15.1	20.4
2015	12.4	12.6	2.8	8.0	0	55.7	7	36.7	27.7	30.8	15.1	22.3
2020	12.4	14.2	2.8	8.8	0	54.1	7	37.1	27.7	29.0	15.1	24.6
2025	12.4	15.8	2.8	9.9	0	53.0	7	37.2	27.7	26.4	15.1	27.2
2030	12.4	16.6	2.8	11.2	0	51.8	7	36.3	27.7	22.3	15.1	29.1

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Table 7

Ten-Year Projection - Federal Budget Perspective
(Billions)

Social Security III Assumptions

Fiscal Year	Social Security		Medicare		Military		Civil Service		Railroad Retirement		All Funds	
	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense
1983	$156.0	$170.1	$ 37.6	$ 39.5	$ 0	$ 16.4	$ 4.7	$ 21.9	$ 2.8	$ 5.4	$201.1	$253.3
1984	169.0	189.4	41.1	45.2	0	17.7	4.8	24.4	2.9	5.9	217.8	282.6
1985	196.2	213.1	47.2	52.4	0	19.3	5.3	27.2	3.0	6.4	251.7	318.4
1986	221.0	238.7	55.6	61.8	0	21.7	5.8	30.8	3.4	6.9	285.8	359.9
1987	243.2	266.4	62.5	72.2	0	24.0	6.3	34.3	3.6	7.5	315.6	404.4
1988	269.3	295.8	69.2	85.1	0	26.5	6.5	38.0	3.9	8.0	348.9	453.4
1989	295.3	326.8	76.1	100.1	0	29.2	7.5	42.1	4.2	8.6	383.1	506.8
1990	343.9	359.7	83.3	117.0	0	31.8	8.1	46.1	4.7	9.1	440.0	563.7
1991	383.8	394.2	91.2	136.7	0	34.1	8.8	49.6	4.9	9.6	488.7	624.2
1992	416.8	430.3	99.8	159.7	0	36.4	9.4	53.5	5.3	10.0	531.1	689.9

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Table 8

Long-Range Projection - Federal Budget Perspective
(Percent of Covered Payroll)

Social Security III Assumptions

Fiscal Year	Social Security		Medicare		Military		Civil Service		Railroad Retirement		Total Funds	
	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense	Income	Expense
1983	10.7%	11.9%	2.5%	2.6%	0%	57.4%	7%	33.0%	25.6%	49.6%	13.1%	16.5%
1984	10.8	12.1	2.5	2.7	0	57.7	7	34.0	25.7	51.9	13.2	17.2
1985	11.1	12.2	2.5	2.8	0	58.1	7	35.0	26.3	53.8	13.6	17.2
1986	11.4	12.3	2.7	3.1	0	59.7	7	35.7	26.6	54.9	14.1	17.7
1987	11.4	12.5	2.8	4.0	0	60.4	7	36.9	26.9	55.4	14.1	18.1
1990	12.1	12.7	2.8	4.0	0	61.9	7	38.5	27.9	54.9	14.8	19.1
1995	12.4	12.9	2.8	N/A	0	62.1	7	39.0	27.9	49.9	15.1	N/A
2000	12.4	12.8	2.8	N/A	0	62.9	7	39.4	27.8	43.5	15.1	N/A
2005	12.4	13.0	2.8	N/A	0	62.3	7	40.3	27.8	39.1	15.1	N/A
2010	12.4	13.9	2.8	N/A	0	60.6	7	41.7	27.7	34.8	15.1	N/A
2015	12.4	15.6	2.8	N/A	0	58.4	7	43.0	27.7	34.0	15.1	N/A
2020	12.4	18.0	2.8	N/A	0	56.5	7	43.4	27.7	32.3	15.1	N/A
2025	12.4	20.5	2.8	N/A	0	55.2	7	43.7	27.7	29.8	15.1	N/A
2050	12.4	26.8	2.8	N/A	0	53.6	7	42.9	27.7	25.5	15.1	N/A

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Chapter III

Social Security's Financial Troubles: Not Just An Imbalance of Numbers

by

DAVID KOITZ

Specialist in Social Legislation

Acknowledgment

This paper benefited from the comments, suggestions, and actuarial estimates provided by Francisco Bayo and Stephen Goss of the Office of the Actuary of the Social Security Administration.

Flora Dean patiently typed the paper, which went through many drafts before it was sent to the Public Printer.

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SOCIAL SECURITY'S FINANCIAL TROUBLES: NOT JUST AN IMBALANCE OF NUMBERS

INTRODUCTION: IS SOCIAL SECURITY ADEQUATELY FINANCED?

Frequently the question is asked, "How can social security be going broke? I've been paying into that system for 30 years, and must have put thousands of dollars away. Where did all that money go?"

Generally speaking, it went to pay for the benefits of current recipients. The social security system in the United States, like social security systems in all the major industrialized countries, is financed on a pay-as-you-go basis. Revenues that come into the system today go out almost immediately to pay current benefits. Workers do not have an account with the Government as they would with a financial institution or brokerage house in which their periodic deposits would build with interest so that at some later point in their lives they would have a substantial sum on which to live. The Social Security Administration instead keeps track of a worker's earnings history—how long he worked and how much he made. How much he put into the system is largely irrelevant. The worker does not have a financial account that builds equity—he has an earnings account that eventually establishes certain benefit rights. In summary, there is no large reserve for either the individual or the system as a whole that provides the resources to pay benefits. A small contingency reserve exists, in the form of four trust funds, only to meet unforeseen adverse events such as a severe recession. The resources for benefits come almost exclusively from current revenues.

If this is the case, then, "isn't the social security system continually on the brink of bankruptcy?"

The answer is no, unless one feels the Government will lose some or all of its ability to levy taxes or reduce benefits. While the system is considered by most experts to have both short- and long-range financing problems, these problems are not generally perceived to arise because the system does not build reserves to finance its future benefits. The feeling that the system is inadequately financed stems mainly from the fact that future outgo is projected to exceed future income.

Most of the projections produced by the social security actuaries in the past couple of years for the cash benefits program show a negative imbalance between income and outgo in two widely separated periods: the current decade being the first one and the period of 2030 and thereafter being the other. The problem of the next few years largely results from adverse economic conditions while the later one is attributed primarily to expected adverse demographic conditions, i.e., recipients will grow at a faster rate than workers paying into the system. Interestingly, the period falling between these two deficiency periods (1995–2030 or so) potentially creates a problem of another sort—i.e., the system will have too large a surplus, at least as perceived by those who advocate a continuation of the pay-as-you-go basis of financing.[1]

The evaluation of the financial status of the social security system in this manner is largely dictated by the way Congress has chosen to finance the program. There is no explicit method spelled out in the law. However, in setting the tax schedule in the law in a manner that produces revenues sufficient only to meet the outgo of particular periods, Congress deliberately adopted the pay-as-you-go basis of financing social security, and therefore, only the difference between projected income and outgo to the system has become the major factor for evaluating its future financial condition.

Critics, particularly those from the actuarial and economic professions, sometimes argue that this method of financing the system is not adequately understood by the public and that, if the "truth" were known, it would not be accepted. The public would consider it as sort of a "ponzi scheme" in which the cost of meeting today's benefit obligations is borne not by the recipients of these benefits but by today's workers—a sort of passing the buck from one generation to another.

They tend to present this issue in two ways. In its simpler form, the issue becomes one of whether or not social security should be advance-funded like most private pension systems. Advance-funding would require building a reserve to meet future obligations rather than waiting until the obligations come due to raise the needed resources. In social security terms, up front funding would require raising the resources from today's workers and employers to pay for their eventual social security benefits, rather than waiting until the benefits are actually payable to levy the taxes to pay for them. Future workers and their employers, in turn, would be required to come up with the resources for their own benefits.

The more complex form of this issue occurs when critics seek to change the social security program. The question of how well the system is financed or whether it is "funded" enough is often only the stepping off point—the more deep-rooted pursuit is one of turning social security into a more equity-conscious system. The intent is to set up a more direct link between what an individual actually puts into the system and what he eventually gets out. An example would be having people rely more heavily on an IRA or similar retirement plan. The broad-based sharing of risks and social costs built into the current system would be lessened or even replaced by a system underpinned more heavily by individual efforts.

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[1] When the hospital insurance portion of the medicare program is brought into the discussion, the "surplus" disappears.

Supporters of the system argue, on the other hand, that to fully fund social security is almost inconceivable. They contend that the Government should not be in the business of accumulating huge amounts of capital to build the reserves to pay for the benefits of each cohort of workers. To do so would eventually lead to the Federal Government's owning or controlling a substantial amount of the industry and wealth of the Nation. Further, even if the Government did not invest such sums in the private sector, but in its own equities instead (as is the case today with the contingency reserves), the huge amount of capital raised for social security would be used to finance much of the other activity of Government—the other revenue raisers of the Federal Government would take second place to social security "investments" in the Government. In effect, income taxes and public borrowing to meet general expenditures of the Government might be supplanted by the Government's borrowing from the social security system, creating a new form of debt financing of the Federal Government.

More important to some of the system's advocates is the fact that if social security were conditioned more heavily on individual equity principles, then its major social function of helping to keep many older workers out of poverty would be curtailed if not eliminated altogether. What purpose, then, would there be in having a Government-run social security system? Mandatory private retirement, disability and survivor plans run by insurance companies, banks, etc., could effectively serve the insurance and annuity goals of the system. But social security in its current form redistributes income—which is largely a function of Government that is not carried out in any significant way by the private sector—and as such it attempts to ration money more generously to those who have had low earnings over their working years. It is also more generous to families than to single workers, and to past and current beneficiaries than it will be to future beneficiaries.

Some critics of the system, on the other hand, argue that regardless of philosophical differences, social security does not measure the need of its beneficiaries, and as a result it redistributes resources poorly. A low-wage earner may not be poor, for he may have other substantial resources. He may be a spouse of a well-paid worker, or he may be a Government worker, entitled to a hefty Government pension, who was not covered by the social security system for very long. A family may or may not have greater needs than a single person—the worker with a family tends to earn more and have higher benefits than single persons, and with a greater number of women entering the work force, many families wind up with social security benefits based on the work records of both spouses.

Thus, it can be argued that deciding how to finance social security is not just figuring out how to get balance between the system's income and outgo—but is driven by deep-rooted concerns about whether there should be a Government-run social security system, what kind of benefits the system should pay and under what conditions. In effect, whether or not social security is adequately financed is not just a numbers question, but involves a wide range of value judgments as well.

SOCIAL SECURITY BENEFITS, TAXES, AND THE SYSTEM'S BOOKKEEPING

(A) The Benefits

Social security cash benefits are provided through two programs. The larger one, old-age and survivor insurance (OASI), provides monthly cash benefits to retired workers and their dependents (which include spouses and children) and to survivors of deceased workers. The disability insurance (DI) program provides monthly cash benefits to severely disabled workers who have had to leave the work force and remain unable to engage in any substantial work in the economy. Benefits also are payable to their dependents. Benefit rights, or what is known as insured status, are earned as a result of working for at least a defined length of time in employment covered by the system. The benefit amount itself is based on the worker's average earnings. The formula for determining benefits is weighted at the front end in order to provide a higher benefit, relative to the worker's earnings, to workers who generally have had low earnings over their careers. For instance, a worker retiring at age 65 in January 1983 with average monthly earnings of $492 would receive a benefit of $368 per month, resulting in a benefits-to-earnings ratio of 0.75, whereas a worker with average monthly earnings of $1,387 would receive a benefit of $709 per month resulting in benefits-to-earnings ratio of only 0.51.[2] Once a person joins the benefit roster, his benefits are kept up with inflation by means of cost-of-living adjustments.

While the program implicitly recognizes age 65 as the normal retirement age, retirement benefits are payable beginning as early as age 62, although such benefits are reduced to take account of the fact that the worker will be collecting benefits longer. Most workers, in fact, do apply for benefits before age 65. Benefits to widows and widowers are payable beginning at age 60 (earlier if the surviving spouse is disabled or caring for the deceased worker's children) but once again they are reduced to take account of early receipt of benefits. Benefits to dependent children generally are payable only up to age 18.[3]

The program has what is known as an earnings test or retirement test, which calls for a reduction or withholding of benefits, if a beneficiary earns more than a specified amount—the intent being to measure roughly the extent to which a worker has really lost earnings as a result of retiring. Frequently, this earnings test is misunderstood, and thought to be a form of means-testing. Though the retirement test can be questioned on various grounds, it is, however, just as its title implies—a measure of the extent to which a person has retired; it is not a means-test. Angry about having his benefits withheld, the frustrated constituent will often complain to his Congressman that a rich person with much larger investment income from stocks, bonds, etc., can collect all of his benefits. Nothing in the program attempts to explicitly measure a beneficiary's worth, either in the form of income or assets, as a condition for benefits.[4] Furthermore, the benefits are tax free, and thus are not means-tested in any indirect manner through the income tax.

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[2] Actually, the worker's earnings are indexed before the averages above are computed, so that they represent more current "earnings" values (i.e., what they would be if earned recently). For calendar year 1983, the benefit formula is as follows: 90 percent of the first $254 of average indexed monthly earnings (AIME) plus 32 percent of AIME from $255 to $1,528; plus 15 percent of AIME above $1,528.

[3] Some beneficiaries ages 18–21, attending college or a postsecondary school, currently are receiving what are called "social security student benefits." As a result of the Omnibus Budget Reconciliation Act of 1981, these benefits will be phased out by April 1985.

Approximately 36 million persons received OASDI benefits in January 1983. Benefits for retired workers ranged up to $809 per month ($1,415 per month if he had a dependent spouse and child); benefits for disabled workers ranged up to $784 per month ($1,176 per month if he had dependents). Approximately 80 percent of current social security beneficiaries are 62 or older. According to survey data gathered in 1978, social security benefits represented almost one-half of the overall income received by individuals living alone, and almost one-third of the overall income of families with an aged head of household.

Hospital insurance (HI), often referred to as part A of medicare, is automatically available to persons eligible for social security cash benefits. For retired persons, HI benefits begin at age 65. Persons enrolled in the DI program become eligible for HI after they have received cash benefits for 2 years. Generally, HI benefits cover costs of inpatient hospital services arising from an injury or illness, as well as care in a skilled nursing facility and home health care following a period of hospitalization. The progam does not cover all costs (in particular it does not cover custodial care) and it requires various deductibles and cost sharing from the beneficiary.

Supplementary medical insurance (SMI), often referred to as part B of medicare, is a voluntary program. A person entitled to HI benefits will be automatically enrolled in SMI, but he may decline coverage. Other persons 65 and older, who are not eligible for the HI benefits, can enroll in SMI at certain designated times. Generally, SMI covers the cost of services furnished by doctors, hospital outpatient facilities, home health agencies, and various other medical services. A premium is required from all persons participating in the SMI program, which is currently $12.20 per month. Usually this premium is automatically deducted from the social security cash benefit amount received each month. Other persons not eligible for cash and HI benefits pay a higher premium.

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[4] A small category of benefits, known as "Prouty" benefits, are subjected to reduction if the beneficiary is entitled to other types of governmental benefits. Prouty benefits, however, are financed with general revenues, not social security revenues (actually the general fund reimburses the trust funds for such payments).

In fiscal year 1981 approximately 7.3 million persons received HI services, and 18.6 million persons received SMI services. Medicare's share of the Nation's total health care expenditures for persons 65 and older was 45 percent.

Table 1.—BENEFICIARIES AND EXPENDITURES

[Beneficiaries in millions]

	Beneficiaries				Expenditures[3] (OASI, DI, HI, and SMI combined) (billions)
	OASI[1]	DI[1]	HI[2]	SMI[2]	
1940	0.2				$0.1
1950	3.5				1.0
1960	14.2	0.7			11.6
1970	23.6	2.7	20.0	19.2	40.6
1980	30.9	4.7	27.4	27.1	160.4
1982	31.7	4.0	28.4	28.2	207.7

[1] Source: Social Security Administration, 1981 Social Security Statistical Supplement. The 1982 line was supplied by SSA's Office of Research and Statistics. Figures represent end of year data, except for 1982 which is for the month of October 1982.

[2] Source: 1972, 1982, and 1983 appendixes to the Budget of the United States; figures represent the average number of people with HI and SMI protection.

[3] Fiscal years. Source: 1981 Social Security Statistical Supplement—the total for 1982 was derived from the 1982 Social Security Trustees' Reports.

Table 2.—SELECTED BENEFIT LEVELS

	Average cash benefits[1]			
	Retired workers		Widows and widowers	
	Current dollars	1982 dollars	Current dollars	1982 dollars
1940	22.60	157.00	20.28	141.00
1950	43.86	169.00	36.54	141.00
1960	74.04	242.00	57.68	189.00
1970	118.10	290.00	101.71	250.00
1980	341.41	386.00	308.12	348.00
1982	416.60		374.31	

[1] As of December of each year, except for 1982, which is as of August.

Source: Social Security Bulletin, December 1982, p. 20.

Table 3.—SOCIAL SECURITY TAX SCHEDULE

Calendar year	Employee/employer tax rate [1]				Maximum taxable earnings
	OASI	DI	HI	Total	
1937	1.0			1.0	$3,000
1950	1.5			1.5	3,000
1960	2.75	0.25		3.0	4,800
1970	3.65	.55	0.6	4.8	7,800
1980	4.52	.56	1.05	6.13	25,900
1983	4.575	.825	1.30	6.70	35,700
1985	4.75	.95	1.35	7.05	[2] 40,500
1986	4.75	.95	1.45	7.15	[2] 43,800
1990	5.1	1.1	1.45	7.65	[2] 57,000

[1] The tax schedule is different for the self-employed.

[2] Estimated based on the Intermediate II-B assumptions in the 1982 Social Security Trustees' Report.

(B) The Tax

Unlike most other programs of the Federal Government, the social security cash benefits program and part of medicare operate of a self-sustaining basis. They have their own revenues derived principally from the social security payroll tax (often referred to as the Federal Insurance Contributions Act tax or FICA tax) which are deposited in three separate trust funds operated by the U.S. Treasury—the OASI, DI, and HI trust funds. The resources of these funds are not commingled in any way with the other moneys managed by the Treasury. Further, it should be noted that the system draws its resources solely from tax revenues and its contingency reserves, and has no authority to use debt financing (i.e., to borrow from the public).

The SMI program, unlike the other three programs, is not self-sustaining. This program is heavily supported with infusions from the general fund of the Treasury. Originally (in 1965) 50 percent of the costs of the program was borne by its beneficiaries, through monthly premiums, with the other 50 percent borne by the general fund of the Treasury. Today, beneficiaries bear 25 percent of the cost with the remainder picked up by the general fund. Frequently, in discussions of social security financing, the status and operation of this program is ignored, since it is not self-supporting and receives no proceeds from the social security tax.[5]

Unlike the Federal income tax, the social security tax is not levied on many different forms of income derived in the national economy. It is levied only on wages and self-employment earnings. It is, however, almost a universal tax since the vast majority of workers in the Nation must pay it. In 1980, approximately 90 percent of the paid work force was covered by the social security system and paying the tax.

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[5] This is not to say that the financial implications of the SMI program are minor today or will be in the future. While this paper does not address that issue, many analysts recognize that the current SMI program represents a significant commitment of future national resources.

The tax is a flat-rate tax that is paid in equal amounts by the employee and employer, or by the self-employed individual (although at a lower rate than that required of the employee and employer combined) and is levied on earnings only up to a certain amount established each year. For 1983, the tax rate required of the employee and employer is 13.4 percent, half of which is paid by the employee with the other half paid by the employer (9.35 percent for the self-employed) on earnings up to $35,700. Once a worker earns that amount, the tax stops for the year. In practice, more than 90 percent of those paying the tax never reach that point, and thus all their earnings are taxed throughout the year.

When the tax was first levied in 1937, it was 2 percent (1 percent on employee and employer each) on earnings up to $3,000 each year, and was paid by 33 million workers. Under current law, it is scheduled to rise to 15.3 percent (7.65 percent on employee and employer each) by 1990, at which point it will level out. At that time there will be an estimated 130 million covered workers.[6] The maximum earnings subject to the tax will rise, as it does now, at the same pace that average earnings in the economy rise.

Table 4.—SOCIAL SECURITY COVERAGE OF THE WORK FORCE

Calendar year	Number of workers covered at some point during the year [1] (millions)	Approximate percent of the work force that was covered [2]
1939	33.8	55.1
1955	65.2	82.5
1965	80.7	86.7
1975	100.2	89.2
1980	[3] 114.3	89.2

[1] Social Security Administration, 1981 Social Security Statistical Supplement, table 30, and 1982 OASDI Trustees' Report.

[2] Senate Finance Committee, Committee Print 97-19, December 1982, table 8.

[3] Preliminary.

Many economists believe that employers do not really incur their portion of the social security tax or at least not for very long. In practice they may pay it, but in reality they do not absorb it in profits. The theory is that the employer's portion of the tax is passed back to the worker in the form of foregone wages (as in the form of lower wage increases) or passed along to consumers in the form of higher prices in goods and services that are labor intensive.

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[6] Based on the Intermediate II-B demographic assumptions in the 1982 Social Security Trustees' Report.

It further should be noted that for income tax purposes the employee and self-employed person must include in gross income the portion of wages paid as the social security taxes, but the employer may deduct his share from gross income as a business expense.

(C) The Trust Funds

The tax basically has three components, one to support the OASI program, another to support the DI program, and a third to support the HI program. The composite of the three is what the employee sees drawn from his paycheck, but in practice the Treasury distributes the proceeds of the tax to each of the trust funds for these programs under an allocation formula prescribed by law. These trust funds also receive investment income on the assets they hold in reserve. These assets or reserves, as they are called, are invested only in U.S. Government securities. As of the end of December 1982, they amounted to about $33 billion.

Table 5.—SOCIAL SECURITY TRUST FUND RESERVES

[In billions of dollars]

Calendar year [1]	OASDHI reserves [2]
1940	2
1950	14
1960	23
1970	41
1975	55
1980	40
1982	[3] 33

[1] End of calendar year.

[2] The DI program was not enacted until 1956; the HI program was not enacted until 1965.

[3] Preliminary estimate.

Source: 1982 OASDI and HI Trustees' Reports, and Office of the Actuary, Social Security Administration.

Although far less often than in the past, the layman sometimes misunderstands the nature of the social security trust funds.[7] Believing that he has a separate account maintained by the Social Security Administration (SSA) or the U.S. Treasury, he cannot understand why it is that the social security system is running into financial difficulty. He perceives that there is a trust fund just for him.

In reality, there are only four trust funds serving as the means for accounting for aggregate social security revenues and expenditures, and as a depository for resources that are not needed to meet current expenses. Social security taxes are not deposited into any sort of individual accounts, but are pooled to provide the resources for meeting current expenditures. The assets which remain in the trust funds after benefits are paid serve only as a contingency backup resource in the event the income flowing into the system does not keep up with expenditures.

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[7] A Lou Harris survey, "Aging in the Eighties: America in Transition," released by the National Council on Aging Inc. in November 1981, indicated that 75 percent of those polled understood that social security taxes from today's workers would not be set aside in a fund for their own future retirement, but would be used to pay benefits for today's retired persons.

The trust fund concept evolves primarily from the fact that the social security tax is a dedicated tax—which, while not earmarked for any one individual when received by the Government, is devoted only to various social security purposes—and by the fact that any excess resources earn interest for the programs.

(D) The Use of Social Security Moneys

Frequently the question is raised of whether social security funds have ever been used for purposes other than social security. From a purely mechanical frame of reference, the answer is no. However, because social security reserves are invested in U.S. Government securities, their loan tc or "investment in" the Government finances other functions of the Government. Thus, from a flow of funds standpoint, social security resources have been applied to many other activities. This use of the funds should not be misconstrued, though, since the investment of social security funds carries with it the same legal obligation that the Government has on any of its financial instruments, such as a Treasury note or bond purchased by a private citizen. Furthermore, the Government has always paid off its social security loans with interest on the requisite due dates (if not before in many instances).

It also should be understood that social security funds are not used just for benefit purposes, but also to meet the administrative expenditures of the program. In 1982, administrative expenses of the OASDI programs amounted to $2 billion and accounted for 1.2 percent of the two programs' aggregate expenditures. They accounted for $573 million, or 1.6 percent, of the total expenditures of the HI program.[8]

(E) Perceptions of the System's Autonomy

While social security funds have never been used for other purposes, this does not mean social security has developed in a vacuum as a Federal program. The layman frequently likes to view social security as something the Government is merely an agent for—a sort of intermediary that has only fiduciary and administrative functions. As in a private insurance setting, once the contract has been signed, the company merely does the bookeeping.

This, however, is a misconception about the role the Government has played with regard to social security. The Congress didn't just set up an insurance plan, for which the Government later was to act solely as the administrator. Like most other social programs, social security has been evolutionary. Since its inception in 1935, impetus from every administration, as well as from numerous Members of Congress has resulted in many changes. Like many other domestic programs, there was no fixed system or "contract."

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[8] Represent estimates derived from 1982 Social Security Trustees' Reports.

This perception of autonomy probably arises from the fact that workers set aside a portion of their wages, and are told that it will be deposited in separate trust funds maintained by the Treasury. This does not mean that social security is a detached arm of the Government and unaffected by Federal policymaking. While income and outgo to and from the system have remained separate from other Government activities (from an accounting standpoint) overall Federal social, fiscal, and other economic policies are and continue to be influenced by the fact that social security is a Federal social program—not a contractual responsibility in a traditional insurance policy sense.

In recent years, the question about the autonomy of the program has come up with regard to budgetary measures. Why, it is asked, are social security matters brought up in discussions about, and actions taken to determine, the size of the Federal budget? The administration and the Congress have no business messing around with this program. I paid for it. I have a contract, which is now being broken.

This, however, is a myth. The most commonly held view on this question is that it was addressed by the Supreme Court's decision in the case of "Fleming versus Nestor" (363 U.S. 603, 1960) in which the Court stated that the worker's interest in social security is "noncontractual" and

> cannot be soundly analogized to that of a holder of an annuity, whose right to benefits are bottomed on his contractual premium payments.

The Court further stated that the social security program

> was designed to function into the indefinite future, and its specific provisions rest on predictions as to expected economic conditions which must inevitably prove less than wholly accurate, and on judgments and preferences as to the proper allocation of the Nation's resources which evolving economic and social conditions will of necessity in some degree modify.
>
> To engraft upon the social security system a concept of accrued property rights would deprive it of the flexibility and boldness in adjustment to ever-changing conditions which it demands. It was doubtless out of an awareness of the need for such flexibility that Congress included in the original act, and has since retained, a clause expressly reserving to it [t]he right to alter, amend, or repeal any provision of the act. . . . That provision makes express what is implicit in the institutional needs of the program. . . .
>
> We must conclude that a person covered by the act has not such a right in benefit payments as would make every defeasance of "accrued" interests violative of the due process clause of the fifth amendment.

There is no question that social security has been politically popular and thus difficult to change, other than in ways which expanded benefits. And there is a general feeling among policymakers that social security carries a long-term commitment, and therefore changes, particularly ones that constrain or cut back on the expected benefit package, should be phased in gradually. These, however, are not legally binding influences.

Major reductions in social security benefits for budgetary reasons have proven difficult to accomplish because of these practical constraints, but even social security has had to accept a certain degree of budgetary scrutiny. In recent years, numerous social security measures have been included in the Federal budget submissions of both Democratic and Republican Presidents. Since 1980 budget reconciliation laws, attempting to bring entitlement programs in line with budget targets, have each contained provisions affecting social security (and medicare) involving hundreds of millions of dollars in reductions. Further, any reading of the annual economic reports of the President will show the concern of Federal economic planners about social security's inflow and outgo to and from the Government. In fiscal year 1982, it represented 26 percent of Federal expenditures and 30 percent of Federal revenues.[9] When it runs an operating deficit, it is true that it has reserves to draw on, but those assets must be liquidated by obtaining other Federal income to pay them off--through income taxes or public borrowing for the most part.

Viewing social security as something distinct and separate may be desirable to retain and promote public confidence, or for political or other reasons, but as such it is simply a practical implicit perception—not driven by a constitutionally binding matter of right, at least not as the program currently stands.

(F) Social Security and the Unified Budget

Some social security analysts argue that because social security carries a long-term commitment, it should be taken out of the so-called unified budget. By so doing, it would be removed from the year-to-year budgetary machinations which are driven mostly by the desire to reach very near-term fiscal policy goals.

Social security and the medicare program have been part of the Federal budget since 1969 when President Johnson created the unified budget. Prior to that time, social security and medicare generally were not included in the Federal budget figures discussed by Congress and highlighted in the media. While the budget documents prepared by each administration included a special analysis showing what aggregate Federal revenues and expenditures would be with social security and medicare included, the so-called "administrative budget," which consisted primarily of Federal programs financed out of the general fund of the Treasury, excluded them and other programs financed out of trust funds. With the passage of the Congressional Budget Act in 1974, social security and medicare became even more entrenched in the Federal budget-making process, since the act included them among the programs that would be explicitly reviewed by Congress each year in arriving at Federal budget targets.

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[9] OASDI and HI programs.

Critics of these changes argue that such actions have altered the perspective of policymakers that social security is a "unique program" among Federal programs. The image of a program that makes long-range commitments has been partially eroded by actions which have brought some relatively significant benefit reductions to various aspects of the program. They argue that there has been a tendency to look for near-term cuts in social security benefits because of the program's size. They contend that if social security were removed from the Federal budget, policymakers would not look to the program to meet short-term budgetary objectives. In their view changes in social security would be made for social security's sake, not because of fiscal policy pressures.

However, supporters of the unified budget argue that removing social security from the budget is merely a paper transaction. The bottom line between aggregate Federal revenues and expenditures would be the same, and the amount of Federal borrowing from the private sector to meet the shortfall would be the same. Removing social security from the Federal budget would not change the size of the Government's overall deficit, even though the deficit might have several components on paper. Critics of the unified budget have argued that the reason President Johnson included social security in the unified budget was to reduce his Vietnam war-driven deficit figures, since at that time social security had annual surpluses (its income exceeded its outgo). Yet whether this was the motivation or not, it created only a short-term advantage. Since 1971 social security consistently has contributed to the size of Federal budget deficits. Between fiscal years 1969 and 1981, social security helped to reduce the deficit only twice.[10] The extra resources needed to pay the benefits (because social security was running deficits) came primarily from assets that had been invested in U.S. Government securities. The proceeds from the liquidation of those securities came from the general fund, which was running a deficit of its own. Therefore, the resources to meet the social security shortfall increased the amount the Government had to borrow from the public to meet its obligations, including its social security "obligations."

If social security were removed from the Federal budget, any operating deficits of the program would continue to cause a draw from the general fund of the Treasury (until the trust funds' reserves were exhausted), so even though the Government's official budget deficit might appear lower, the amount the Government would have to borrow from the public would be the same as if social security had not been taken out of the budget. Conversely, if social security were to run operating surpluses again (revenues exceeding outgo), then this would reduce the amount the Government would have to borrow from the public to meet its general fund "obligations" since the social security surpluses would wind up in the general fund after Government securities were purchased by the trust funds.

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[10] When the medicare programs also are included in the figures.

One conclusion that might be drawn from this debate is that removing social security from the Federal budget might create "some" short-lived behavioral changes among policymakers, but because social security is so large a Federal program, and is so interconnected with the general fund through its investment process, the program's impact on economic policymaking would not likely be ignored for very long.

THE SYSTEM'S FINANCIAL PROBLEMS [11]

The 1970's was a decade of rude awakenings for the social security system. After more the three decades of substantial program growth accomplished through relatively low tax rates, economic and demographic events took a sharp turn for the worst and no longer bestowed favorable influences on the projections of the financial condition of the system. The new economic circumstances were the ones of most immediate concern, since by the mid-1970's they had already begun to take their toll. The new demographic circumstances, on the other hand, presented for the most part a change in a far-off future forecast, which although serious, created an image problem, not an immediate financial one.

There are many options to eliminate the numbers problem, and while it may be difficult to achieve a political consensus around one or more of them, there is little doubt that Congress will shortly enact some sort of remedial legislation. But this won't be the first time Congress has addressed the numbers issue in the past few years. Since 1977, Congress enacted legislation on three separate occasions to deal with the system's financing problems. Whether the next steps taken will produce remedies of longer duration is obviously unknown. The public, however, seems to have lost a significant degree of confidence that the system will survive over the long haul, and it is unlikely that recurring "short-lived solutions" will remove these doubts.

While these doubts do not seem as yet to have led to a shift in the public's favorable attitude toward the program, it is possible that a persistence of "poor financial reports" and insufficient responses could erode that support.

(A) Where We Have Been—The System's Condition During the Past Decade

With reserves of the system equaling about 1 year's worth of expenditures at the beginning of 1970, the social security cash and medicare hospital insurance programs were adequately protected against any immediate adverse economic events. What they were not prepared for, however, was the sustained period of adverse economic activity that plagued the 1970's. Big benefit increases were enacted in the late 1960's and early 1970's (most notable was a 20-percent across-the-board increase in 1972) and automatic benefit increases began in 1975, tieing benefit levels to inflation. Social security revenues coming from the tax on wages rose fairly significantly, but not as rapidly as the rise in benefit expenditures caused primarily by the benefit increases. At the time of enactment of the automatic benefit increase provision in 1972, social security financial projections assumed that average wages would grow 24 percent more than prices over the period from 1972 to 1981. They actually grew by 9 percent less than prices in that period.[12] Moreover, unemployment was estimated to average about 4 percent during those years, while it actually averaged 6 percent. Consequently, the reserves of the system declined not only in percentage terms, but in absolute dollars. After reaching an all-time high of $55 billion in 1975, OASDI and HI reserves dropped off to the point where they were only $32.7 billion at the end of December 1982. They amounted to only 16 percent of the estimated 1983 outgo,[13] in contrast to the full year's worth of outgo that was on hand in 1970.

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[11] This portion of the paper was given at a symposium entitled "Checks and Balances on Social Security" at The American College in Bryn Mawr, Pennsylvania, on Oct. 29, 1982. The Symposium, sponsored by the McCahan Foundation for Research in Economic Security, was given in honor of Robert J. Myers.

Although the hospital insurance part of medicare is occasionally alluded to in the remainder of the paper, the discussion is directed primarily at the social security cash benefits programs.

Although there was some apprehension about the 20-percent benefit increase and the tieing of future benefits automatically to inflation, there were few critics claiming the system would not meet its benefit obligations with the resources that would come in. Thus, at least on a pay-as-you-go basis, the system appeared to be adequately financed.

This image faded very quickly. By 1975 it became obvious to most social security experts that the system's outgo would shortly exhaust all incoming revenues and reserves. Projections issued in the spring of 1977 showed that the DI trust fund would have been unable to meet its obligations beginning in 1979; the OASI fund beginning in 1983 (in 1981 on a combined basis).

With the passage of the Social Security Amendments of 1977, the financial forecasts of the cash benefits program improved significantly. At the time of enactment (December 1977) the social security actuaries projected that the amendments would adequately finance the OASDI programs until 2030 or so. While annual deficits occurring in 1978 and 1979 would continue to erode the combined OASDI reserve balance, annual surpluses beginning in 1980 and continuing thereafter would bring the combined balance up to 59 percent of 1 year's outgo by 1987.[14] The improved short-run outlook was brought about by legislated changes on the revenue side, estimated at that time to add some $80 billion in new revenues to the OASDI programs in the 1978–83 period, as well as changes in benefits resulting in reductions of outgo of $7.5 billion during that same period.

The HI program, for which there also had been forecast a long-term financial imbalance, generally was unaffected by the 1977 amendments, but continued to benefit from a favorable near-term outlook.[15]

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[12] Derived from a memorandum from the Office of the Actuary of the Social Security Administration entitled "History of Recent OASDI Long-Range Assumptions and Actuarial Balance as Published in the Annual Trustees Reports" by Francisco R. Bayo, Feb. 2, 1982.

[13] Estimates based on the 1982 OASDI Trustees' Intermediate II-B Assumptions, modified to reflect the effects of the Tax Equity and Fiscal Responsibility Act of 1982.

[14] It should be noted that the near-term economic assumptions used to make the projections were, for the most part, the Carter administration's current forecast for the following 5 years. They were no assumptions independently developed by the actuaries.

(B) The Outlook for the Short-Range Future

Although the 1977 amendments were widely publicized as keeping the OASDI programs solvent until some point well unto the next century, current projections show the OASI program being unable to meet its July 1983 benefit payments, unless Congress takes action this spring. Economic conditions during the 1978–81 period were much worse than anticipated at the time of passage of the 1977 amendments. These adverse economic conditions are almost entirely responsible for the short-run problems now facing the system. Demographic factors, in fact, have had a slightly favorable effect. The estimates of future beneficiaries made in 1977 have turned out to be somewhat on the high side (specifically in the DI program) and this is offsetting slightly the deleterious effects on the system of the poor economic conditions.[16]

The inflation rate in 1977 was 6.5 percent, and it was projected to fall to 4.7 percent in 1980. The actual rate of inflation during the period was dramatically higher, reaching the double-digit range in 1979, 1980, and 1981. As with the problem that led to the near-term steps taken in the 1977 amendments, this high inflation rate resulted in very large annual benefit increases and benefit expenditures, while at the same time, the earnings upon which the social security system's income relied rose at a slower pace. Unemployment also was higher than expected, and thus revenues did not keep up with the higher expenditures.

Moreover, even though significant increases in social security taxes were enacted in 1977, the major increases were not scheduled to take effect until 1981 and later. In the period 1978–80, less than $17 billion in new revenues was brought into the system as a result of the 1977 legislation.[17] The social security actuary's analysis done at the time of enactment of the 1977 legislation further showed that the OASDI programs would operate with a low reserve cushion for a number of years. The actuary estimated that outgo would exceed income in 1977, 1978, and 1979, and that the system's reserves would represent only 3 months' worth of expenditures at the beginning of 1981.

In summary, the margin of "safety" built into the program by the 1977 amendments was not very large for the following 5-year period, and deviations from the economic and demographic assumptions underpinning that legislation could easily alter the financial condition of the system in the near-term future, as in fact, happened.

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[15] Although a greater share of the overall social security tax was allocated to the cash benefit programs by the 1977 amendments, ad hoc increases in the taxable earnings base also contained in those amendments were estimated at that time to leave the HI program in the approximate financial condition that would have existed without the enactment of the amendments.

[16] For instance, the number of OASDI beneficiaries projected in 1977 for calendar year 1985 was *2.7* million higher than that projected for 1985 in the 1982 trustees' report.

[17] In contrast to the $72 billion estimated to be brought in during the 1981–83 period; these estimates were supplied to the Senate Committee on Finance, Aug. 14, 1981.

(C) Controversy Over the Short-Range Situation

In the past 2 years considerable controversy has arisen over the extent of the system's looming short-term financial problems. Initially, the controversy arose out of apprehension that the Reagan administration was attempting to use adverse projections of the financial condition of the system as the basis for reductions in benefits. Critics were concerned that what the administration really wanted was big near-term cuts to help reduce projected Federal budget deficits. Fueling this distrust was the fact that while officially propounding a relatively optimistic picture for the economy over the next 5 years, the administration came out with a fairly pessimistic "less official" picture of the economy for social security planning purposes. The administration was heavily criticized for its use of so-called "worst case" assumptions to justify major reductions in social security, while it was seeking public support for its tax and budget cuts by contending that they would produce a very robust economy.

However, as the economy worsened in the latter half of 1981 and the early part of 1982, the administration's official economic forecast grew more pessimistic, and actually moved more in line with the less optimistic forecasts that had been made by outside economic forecasting groups during the prior year. As a result, skepticism about the "poor" near-term condition of the system seemed to fade with a consensus forming that the system did have near-term financial problems that were about to emerge, perhaps by mid to late 1984.[18]

But even within this emerging consensus, a significant element of controversy remains today—specifically, over how big the problem will be. Depending upon which set of economic assumptions one chooses, radically different images appear about the amount of money the system "is short." Controversy also exists over whether the problem is one of this decade alone, or whether it will be of longer duration.

Even where there is agreement over the particular set of economic assumptions to be used, how much the system should have in reserve is in question. While from a traditional perspective, building to or maintaining reserves equal to a 3- or 6-month level would hardly have appeared as an excessive contingency fund, critics have argued that those pursuing such reserve levels once again are attempting to push through large benefit cuts by creating a fear of inadequacy.

Traditionally, an ample reserve for the system to meet contingencies has been seen as an absolute necessity since the system is self-financing. There has been no standard set in statute, but probably the most generally recognized, although arbitrary, recent rule of thumb was that set by the 1971 Advisory Council on Social Security, which said that trust fund reserves should range from a low of 9 months' worth of assets (75 percent of 1 year's expenditures) to a high of 15 months' worth of assets (125 percent of 1 year's expenditures). In 1983 dollars, this would mean having a reserve for the OASDI programs ranging from $130 billion to $220 billion, in contrast to the $22 billion [19] that was on hand at the beginning of 1983.

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[18] As was projected under the intermediate II-B assumptions of 1982 Social Security Trustees' Report.

From a historical perspective, even this range of contingency reserves would not be very large; a 25- to 50-percent reserve (3 to 6 months' worth of benefits) would be viewed as very small. In the early years of the program, reserves were very much larger. For instance, as the following table shows, more than 11 years' worth of assets were on hand in 1950, more than 4 years' worth were on hand in 1955 and almost 2 years' worth were on hand in 1960.

Table 6.—HISTORICAL OASDHI RESERVE PERCENTAGES, 1950–81

Calendar year	Trust fund balances at the beginning of year as a percent of outgo during the year		
	OASI and DI combined	HI	OASDHI combined
1950	1,156		1,156
1955	405		405
1960	186		186
1965	110		110
1970	103	47	95
1975	66	79	68
1980	25	52	29

Source: 1982 OASDI and HI Trustees' Reports.

It took only 5 years (from 1976 to 1981) for the combined OASDHI reserves to fall by more than 35 percentage points (OASDHI reserves stood at 60 percent of 1-year's outgo at the beginning of 1976, but were ony 23 percent of 1-year's outgo at the beginning of 1981). Thus, even on a relatively short time frame basis, say only a 5-year period, a contingency reserve of 3 months' worth of assets (25 percent of 1-year's outgo) would hardly give much assurance that the system could be kept out of red ink. If one expected Congress to take action annually on social security, as it does with appropriation bills for other activities of the Government, then a 25-percent reserve would be quite ample, for it is not likely that even under the most adverse economic conditions, such a reserve would be used up in a single year. However, if one wanted the system to be self-sufficient in the future, planning to have a 25- or 50-percent reserve for 5 years from now would provide relatively little assurance that Congress will not have to intercede again.

Critics of the view that ample reserves must be established argue that the traditional manner of achieving and maintaining them would require too great a benefit reduction or tax hike. They argue, for instance, that if the trust funds had authority to borrow from the general fund of the Treasury, the amount of assets held in reserve could be kept very low—possibly as low as 8 or 9 percent in the cash benefits programs and 5 percent in the hospital insurance program. Thus, large near-term benefit cuts or tax increases to build up the trust funds to higher levels could be avoided simply by having this "back up" authority. The suggestion is not that transfers from the general fund would be made, but that in fact by not trying to have a substantial reserve in the trust funds, the amount of resources the system is short could be shown to be much less. In other words, one could plan for changes in the system of a much smaller magnitude, if there were back up authority to borrow from the general fund "if necessary." A memo put out by the social security actuaries in September 1982 illustrates this point. It shows that to keep the system afloat with the lowest possible reserves would require less than one-fourth of the aggregate tax increases or benefits cuts over the next 4 years than would be needed to achieve a 30-percent reserve cushion. The following table, summarizing material in the actuary's memo, shows the actual difference in the dollar amounts of change required.

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[19] Includes $12.4 billion borrowed from the HI fund under Public Law 97–123.

Table 7.—ADDITIONAL RESOURCES OR BENEFIT CUTS REQUIRED TO MAINTAIN OASDI RESERVES AT VARIOUS LEVELS [1]

[In billions of dollars; calendar years]

	Alternative 1	Alternative 2
	Additional resources [2] 1983-86	Benefit cuts [2] 1983-86
To have absolute minimum reserves [3]	17	17
To have a 30-percent reserve by the beginning of 1987	75	74

[1] Rounded to nearest billion dollars; assumes extension of interfund borrowing after 1982 from the DI and HI trust funds.

[2] Based on the Intermediate II-B assumptions of the 1982 OASDI and HI Trustees' Reports, modified to reflect the effects of Public Law 97-248, the Tax Equity and Fiscal Responsibility Act of 1982.

[3] Defined as 8-percent reserves in the cash benefits programs and 5-percent reserves in the hospital insurance program.

Source: Derived from a Sept. 21, 1982 memorandum from Solomon M. Mussey of the Office of Financial and Actuarial Analysis of the Health Care Financing Administration and Jeffrey L. Kunkel of the Office of the Actuary of the Social Security Administration entitled "Estimated Amounts of Changes in OASDI and HI Income or Outgo Required To Achieve Selected Target Asset Levels."

Opponents of the use of general revenues, however, would consider this course of action to be a significant break with the traditional, self-financing principle followed by the social security system. They doubt that this would remain only a "contingency" use of general revenues, perceiving it to be a foot in the door for eventual significant infusions. The financial projections of the system made during the past 10 years or so have been consistently optimistic.

While they appeared to be reasonable at each point in the recent past when social security was altered, actual economic experience repeatedly turned out to be worse. Even if economic conditions over the next few years were to turn out to be only slightly more pessimistic than anticipated, the system could wind up using significant amounts of general revenues quickly.

In conjunction with this concern is likely to be apprehension that social security would not end its use of general revenues after a short time (or if the money represented a loan, that it might never be able to return the funds to the general treasury). While under the 1982 intermediate forecast of the social security trustees, a favorable financial period has been forecast for the cash benefits programs beginning in the 1990's and continuing into the early part of the next century, the HI program is projected to run into financial problems beginning in the early 1990's and continuing indefinitely into the future. The combined financial picture of the cash and health benefits programs is unfavorable, showing that the system as a whole would not recover from the problems which begin in 1984. Thus, opponents of the general revenue "reserve" approach are likely to be somewhat doubtful that general revenues would only be minimally or temporarily used.

This is not to suggest that there would be willingness to make big benefit cuts or tax increases to build up social security's reserves on the part of those wishing to avoid the use of general revenues. They too might strive for the least possible changes to the tax and benefit sides of the system. However, their minimal action might be coupled with safeguards being written into the law requiring future automatic increases in taxes or automatic benefit constraints, if the minimal action taken on the basis of today's "best-guess" assumptions proved to be optimistic in the future. One approach might call for a limited tax rate or wage base increase to occur in the period immediately following a point when reserves of the system fall to a certain level, say 20 percent of 1 year's expenditures. Or, conversely, certain benefit constraints might be imposed, such as a limitation on the size of the next possible cost-of-living increase. Either action could be of a magnitude sufficient to keep the system's reserves from falling below the 20-percent threshold.

In summary, these two "minimum action" strategies—the general revenue "reserve" or triggered tax or benefit changes—might be more appealing than enacting big tax increases or large benefit reductions. However, they too potentially have a political drawback—namely, uncertainty about the image they would give the public. Congress, in effect, would be taking steps today to shore up the system, but at the same time possibly leaving it on the edge of insolvency for a number of years, perhaps many years. If these triggering devices were used extensively, the public could be repeatedly barraged with press accounts of the proximity of the social security system to insolvency, and thereby might not only lose its already shaken confidence in the system, but possibly abandon its support for the system as well.

On the other hand, triggering devices, if not used extensively, possibly would avoid "official sounding" statements that social security is in danger, and Congress would not have to take discrete steps to shore up the system every few years. Social security then would likely be taken out of the limelight, and the passage of time would be permitted to restore confidence that the system can and will remain solvent.

The larger question, however, about the image of taking minimal action is the extent to which it would diffuse public apprehension about the longrun financial problems of the system—the projected problems for the baby boom generation in the next century.

(D) The Long-Range Situation

Since 1973, the trustees of the social security programs, under the guidance of the actuaries of the Social Security Administration, have been reporting that the cash benefits programs will have a long-range financing problem. Much of this projected problem was addressed by the 1977 amendments, which by combining major tax increases with major future benefit constraints, significantly reduce the size of the projected deficit.[20]

Long-term analysis of the financial condition of the social security system is required by law, which states that the trustees shall include in their annual report to Congress "a statement of the actuarial status of the trust funds." Typically, this analysis involves financial projections 75 years into the future. Because they are so long range, critics frequently argue that they are not worth much attention. The argument goes that attempting to see that far into the future can be nothing but speculation. They point out that economic and demographic factors are extremely volatile when viewed over a long period of time, and maintain that it serves little purpose to lend any degree of credence to a "projected" deficit that won't arise until almost 50 years from now. Moreover, if one averages the projected problem over the full 75-year valuation period, it is only equal to 10 to 15 percent of the cost of the program—certainly not a dramatic amount given the potential softness of the estimates.

However, those concerned about the long-term imbalance argue that if one looks at the potential problem in the latter part of the long-term period (2032 to 2056) it is not so insignificant—it equals 26 percent of the cost of the program in that period. They point out that the potential imbalance is not a consequence of "crystal-balling" about the economy 50 years from now, but about demographic events that in part have already occurred. The shortfall of the next century is a consequence of projecting the post World War II baby boom generation reaching their retirement years when a baby-bust generation from the 1970's (and possibly later) will have to support them. Thus, they would argue that to ignore such projections, on the basis that they deal with a period that is so far off, is to dismiss a significant signal of what could be a fairly large shortfall.

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[20] The projected deficit shown in the 1977 Trustees' Report issued in May 1977, prior to enactment of the 1977 social security amendments, was 8.2 percent of taxable payroll. After enactment of the amendments, the projected long-range deficit was shown to be 1.46 percent of taxable payroll.

But regardless of the volatility of the numbers or the size of the problem they portray, these adverse projections leave an image in the public's mind. Other than a few social security or insurance experts, few members of the public understand the numbers or their significance or insignificance. What they do understand is the press stories that accompany each "official sounding" report that the social security system is projected to have problems. Even if social security didn't have immediate financial problems, the existence of projections continuously pointing to a long-term deficiency in the system would likely further weaken public confidence in the system. A projected long-term imbalance is for some a sign that the system will not work, creating substantial pressure either to make very fundamental changes or scrap the system altogether.

The following table shows the various alternative sets of long-term projections included in the social security trustees' report issued in April 1982. The bottom line of the table shows the long-term situation for the 75-year valuation period as a whole by indicating whether on average the cash benefits programs will have a surplus or a deficit.[21] Instead of showing the magnitude of long-term financial events in dollar terms, the social security actuaries use a shorthand method that avoids having to show enormous, almost incomprehensible sums of money. The condition of the system, or changes thereto, are expressed in terms of how much the revenues or expenditures involved would amount to as *a percent of the total taxable payroll,* which is made up of all salaries and self-employment income of persons who work in employment covered by the social security system. For instance, in 1982 total taxable payroll was estimated to have been about $1.4 trillion. Outgo from the cash benefits program was equal to $160 billion, or 11.8 percent of taxable payroll. Each year's income and outgo in the 75-year forecast, as well as the difference between income and outgo (i.e., the deficit or surplus) is put in these terms. The following table shows the average annual income, outgo, and deficit or surplus for the entire 75-year period under the four alternative 1982 trustees' forecasts.

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[21] No 75-year analysis is done for the HI program. The long-range projections for HI only cover a 25-year period. The following discussion, therefore, is limited only to the cash benefits programs.

Table 8.—LONG-TERM OASDI FINANCIAL FORECASTS [1]

[In percent of taxable payroll]

	Alternative forecasts			
	Optimistic	Intermediate II-A	Intermediate II-B	Pessimistic
Income	12.27	12.27	12.27	12.27
Outgo	10.98	13.09	14.09	18.74
Surplus (+) or deficit (−)	+1.29	−.82	−1.82	−6.47

[1] Represents a yearly average condition of the program for a 75-year period into the future. Excludes the HI program.

Source: 1982 OASDI trustees' report.

As the table shows, three of the four longrun forecasts in the 1982 trustees' report projected the cash benefits programs to be in an annual deficit position on average through the 75-year period. The projections around which there now seems to be the most consensus is the intermediate II-B forecast, since this represents the traditional middle of the road path. As the following table shows, the average deficit for the 75-year period is 1.8 percent of taxable payroll.[22] This deficit is equal to about $25 billion a year in 1982 dollars. Multiplying this figure by 75 gives a rough picture of the total deficit for the entire 75-year period of $1.8 trillion, once again in 1982 dollars. Another way of looking at it is that it would take a tax increase of about 0.9 percentage points on employee and employer each, beginning today and applying to each year throughout the 75-year period, in addition to the increases already built into the law, to eliminate the long-term deficit.

As previously mentioned, this deficit is equal to 13 percent (or about one-eighth) of the overall costs of the program (which are estimated to be 14.07 percent of taxable payroll—the bottom line of the following table).

The next table shows the intermediate II-B forecast in three different time segments of the 75-year forecast period.

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[22] Last spring's intermediate II-B projected deficit of 1.82 percent of taxable payroll was recently reduced by minor tax provisions included in the Tax Equity and Fiscal Responsibility Act of 1982 which was signed into law on Sept. 3, 1982. The revised II-B deficit is currently 1.80 percent of taxable payroll.

Table 9.—1982 INTERMEDIATE II-B OASDI FORECAST—THREE 25-YEAR SEGMENTS (INCLUDING IMPACT OF 1982 TAX ACT)[1]

[In percent of taxable payroll]

	Average tax rate	Average cost	Average surplus (+) or deficit (−)
1982-2006	12.01	11.35	+0.66
2007-2031	12.40	14.08	−1.68
2032-2056	12.40	16.79	−4.39
1982-2056	12.27	14.07	−1.80

[1] Public Law 97-248, the Tax Equity and Fiscal Responsibility Act of 1982.

Source: Office of Actuary, Social Security Administration.

As this table shows, the long-range problem rears its head in the second 25-year segment, but doesn't peak until the third 25-year segment. Actually, outgo from the system starts exceeding income somewhere between 2010 and 2015, but trust fund reserves that build up in the 1990's and in the 2000-10 period carry the program until the late 2020's. The average deficit in that third segment of 4.39 percent of taxable payroll is equal to about 26 percent of the projected costs of the system in that period. In 1982 dollars, this would amount to $60 billion per year; $1.5 trillion over the entire 25-year period.

In the past, a rule of thumb that was frequently used to assess whether or not serious attention should be paid to a longrun imbalance situation was that if the average deficit for the projection period represented more than 5 percent of the cost of the program, it was outside of what was considered to be reasonable bounds of variance from actuarial soundness. This is not to say that the old standard was anything more than an arbitrary rule, but it did keep Congress from feeling that it had to step in and do something every time a minor imbalance showed up in the numbers.

The projected imbalance of 13 percent of the cost of the program under the current intermediate II-B forecast is outside of the old traditional standard. However, some analysts have suggested that because this imbalance is so close to the 5-percent tolerance standard, it may be reasonable to ignore it. This is bolstered by the fact that other than the problems emerging during the next few years, the financial forecast for the cash benefits programs is basically favorable for 50 years or so into the future. If one assumes that the farther out you go into the projection period, the softer the numbers become, then certainly the long-term deficit for the system becomes less meaningful.

But to do so would almost suggest that there is no firm basis or pattern to the long-term projections—that the potential imbalance is caused more by putting random numbers together, than by discernible economic or demographic events. Using the average 75-

year deficit figure to arrive at such a decision under the current projections, however, would ignore the magnitude of the problem that appears in the third segment of the long-range estimates, which is driven mostly by discernible (although recognizably volatile) demographic circumstances. If one applies the 5-percent rule to that period alone, the projected imbalance of 26 percent of the cost of the program is well beyond the standard. Even if one wanted to, how could a financing deficiency of 26 percent of the program's costs be ignored, particularly given that much of the money involved would go to people now in or entering the work force?

It also would be somewhat misleading to say that the problem for the cash benefits programs is almost 50 years away. Granted, once a solution is worked out to fix the financial shortfall of the 1980's, the favorable demographic effects of having those in the baby boom generation reach the most productive part of their work lives could very likely create a very healthy financial situation for the program for the period beginning in the 1990's and continuing until the late 2020's or so (using the intermediate II-B forecast). But this favorable financial period may not last as long as some analysts suggest. The first wave of the baby boom workers will reach retirement age by about 2008. People born in 1950 will be age 62 in 2012. Furthermore, outgo from the cash benefits programs begins to exceed income some time between 2010 and 2015 under the forecast. The only reason the system appears solvent until the late 2020's is that the reserves projected to build up during the earlier favorable period are assumed to be used to carry the system for about 15 years. However, this assumes that the reserves would be permitted to build up. It assumes, for instance, that the social security tax would not be reduced or some alternate use made of a surplus which is projected to grow as high as $25 billion per year by 2005 (in 1982 dollars). In its 1981 proposals, the Reagan administration proposed tax reductions for that period. Others have suggested that the excess resources be used to help reduce the long-range HI financial problem, which is projected to begin as soon as the early 1990's.

But what makes the so-called "surplus" even more uncertain is that the forecast for this period is built upon two key assumptions that are fairly optimistic by today's standards. One is that on average, real wages (or productivity) will grow by 1.5 percentage points per year and that the birth rate will level out at the zero population growth (ZPG) level of 2.1 births per woman (in her lifetime). Neither one of these conditions exists today. The last time real wages grew annually by 1.5 percentage points per year for a sustained period of time was in the 1965 to 1969 period. A birth rate of 2.1 births per woman hasn't been reached since 1971. It is somewhat ironic that some critics of the current "middle of the road" projections are looking for ways to make them look pessimistic, when the two most fundamental assumptions underpinning them are fairly optimistic when compared to conditions that have existed now for more than a decade.

Thus, it is conceivable that the OASDI long-range problem is considerably closer than 50 years away.

It also has been suggested that maybe we should not create problems for ourselves by making long-term forecasts. The argument goes that most other countries don't go out 75 years into the future with their estimates, nor do private pension systems—maybe 75 years is too much. Why should we be virtually unique with our social security forecasts? By making long-range forecasts that show such a big potential problem, we are unduly scaring people, particularly those now receiving benefits. They feel threatened that changes will be put in place today, affecting them.

One could argue, however, that it is too late for a soothing reduction of the projection period. The public already has been saturated with the idea that social security has financing problems. It might be difficult to sell a proposition that we no longer have a long-range problem, because we have decided not to project one. Some would go so far as to argue that long-range forecasting had simply been a "fair-weather" device. As long as the projections were favorable, and they gave assurance to the public that the program we have adopted is sound, they were useful. But now that the projections have turned sour, they should be hidden.

Yet still another criticism levied against the longrun projections is that they now are serving primarily as an instrument for political purposes. Specifically, the argument is made that the current administration, by pointing out a long-term problem, has been trying to push through social security cuts to help reduce near-term projected budget deficits.

How the longrun estimates are used may be at issue, but the preparation of longrun estimates is not a newly created device to meet political ends. For almost 40 years longrun projections helped to maintain public confidence in the system. Originally (in 1935) a long-range forecast was made indicating the condition of the system until 1980. Shortly after that a method was devised making estimates under an actuarial concept of "into perpetuity," i.e., there was no end to the projection period. Lack of understanding of this concept led to the initiation of 75-year projections beginning in 1965. Moreover, what aided in this "confidence building" was the fact that the projections always were (and still are) largely the product of "independent actuaries," not politicians.

It also should be noted that the magnitude of the longrun problem reflected in the most recent trustees' report has not changed much since 1977 (when a different administration was in power). Furthermore, the major changes contained in the 1977 social security legislation dealt with an even larger longrun problem that both the Ford and Carter administrations recognized. No administration in the past has failed to recognize longrun imbalances as they were revealed. Generally, that recognition was clearly enunciated in the annual report of the social security trustees.

(E) The Public's Perception: "Will Social Security Be There When I Retire?"

The question of the financial soundness of social security has become a sort of festering issue. It is irritating because it won't go away, or it hasn't for at least 10 years now. It is one of those issues that has bred deep-rooted insecurities.

In the past 5 or 6 years, apprehension about the financial soundness of the system has clearly been reflected in public opinion polls. This apprehension is most pronounced among younger workers.

In a 1979 survey conducted by Lou Harris,[23] 8 out of 10 employees surveyed (both those currently working and retired) had less than full confidence that future workers would be willing to pay the higher taxes needed in the future to finance the benefits—42 percent had hardly any confidence at all. While those persons age 18–34 showed the highest degree of doubt, uncertainty showed up with even those age 50–64 (70 percent of whom had less than full confidence that social security would pay their benefits when they retired—28 percent had no confidence at all).

A survey conducted in 1980 by Peter D. Hart Research Associates, Inc., for the 1979–81 National Commission on Social Security[24] indicated that 61 percent of the nonretired persons polled did not expect that funds would be available to pay their retirement benefits, with almost three-fourths of those between the ages of 25 and 44 expressing such doubts.[25]

Similar findings were made in a later survey conducted by Lou Harris in early summer 1981. Its principal finding dealt with the "confidence" question, and one of the conclusions drawn from the poll was that by a 54- to 33-percent majority "Americans now have hardly any confidence that the present social security system will be able to pay them benefits when they retire."[26] Once again the lack of confidence was most observable among younger workers where 68 percent of those polled between the ages of 18 and 54 had "hardly any" confidence that the system would be able to pay their benefits. Only 6 percent of this age group had a great deal of confidence.

Another Lou Harris poll in the summer of 1981 raised the questions of whether the system really was "close to bankruptcy" or whether such statements were merely a way for the Reagan administration to use scare tactics to force Congress to cut back benefits. By a 53- to 40-percent majority, those polled felt that the system was close to bankruptcy. A CBS/New York Times poll at about the same time found that by a 57- to 28-percent majority, its respondents did not believe that social security had enough money to meet its obligations. The same survey found that by a 54- to 30-percent majority, those polled did not think the social security system would have money available to provide their benefits when they retired.

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[23] "1979 Study of American Attitudes Toward Pensions and Retirement (A Nationwide Survey of Employees, Retirees, and Business Leaders)," conducted by Louis Harris and Associates, Inc. Commissioned by Johnson and Higgins, February 1979.

[24] This Commission is now defunct. It was a one-time study group created by the 1977 social security amendments to examine social security's financing problems and other issues. Its report was issued in March 1981. This Commission should not be confused with the more recent National Commission on Social Security Reform created by an executive order of President Reagan to work out a bipartisan solution to social security's financing problems.

[25] "A Nationwide Survey of Attitudes Toward Social Security," conducted by Peter D. Hart Research Associates, Inc., for the National Commission on Social Security.

[26] "Aging in the Eighties: America in Transition." A survey conducted by Louis Harris and Associates, Inc., for the National Council on Aging, Inc., November 1981.

Later in the fall of 1981, an NBC/Associated Press poll also raised the question of whether the system would have the funds to pay their respondents' benefits—73 percent of the respondents said they had little or no confidence of such.[27]

A Gallup survey done for the U.S. Chamber of Commerce in the spring of 1982 showed that 63 percent of the workers polled felt they would not get any social security benefits when they retired, and 86 percent felt the system had major financing problems.[28] And again in November 1982, a Los Angeles Times poll showed that by 3 to 2 its under age 45 respondents felt that the system had major financial problems with half of the respondents not expecting to get any benefits at all.[29]

It should be noted, however, that the mounting uncertainty about the social security program is paralleled by a similar decline in confidence in many other institutions in society—Congress, the Presidency, big business, organized labor et. al.[30] Thus, while adverse financial reports may be feeding the public's apprehension about the system, it is quite possible that the public's general mood about current conditions in society also are heavily responsible for its pessimism about social security.[31]

It also is interesting to note that the public's lack of confidence in the system's survival does not appear to have manifested itself in a clear dislike of the system. The 1980 Peter Hart survey indicated that 76 percent of those polled would oppose ending the system. Similar feelings were expressed in a more recent (November 1982) NBC/Associated Press poll in which 78 percent of its respondents were opposed to phasing out the system.[32]

But even with this somewhat favorable attitude, there are other signals that younger workers are becoming disillusioned or that they are at least adopting a somewhat guarded attitude about the system. The November 1982 Los Angeles Times poll showed that half of its under age 45 respondents were in favor of making social security voluntary. The CBS/New York Times poll in July 1981 found that 53 percent of their respondents (all ages) favored making the social security system voluntary. Even the Peter Hart survey a year earlier showed that nearly one-third of those between ages of 25 and 34 expressed a desire to leave the system if given the choice (with 25 percent of all nonretired persons expressing such a desire.)

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[27] Royce Crocker, "Social Security, 1981: Public Opinion," Public Opinion Brief, Congressional Research Service, Library of Congress. Issue Brief IB 81143. Archived Mar. 25, 1982.

[28] "Consumer Attitudes Toward Social Security and Cost-of-Living Adjustments." A survey conducted by the Gallup organization for the Chamber of Commerce of the United States, 1982.

[29] George Skelton, "Social Security Issue Splits Reagan, Public," Los Angeles Times poll, Nov. 21, 1982.

[30] Louis Harris, "Public Confidence in Key Institutions Is Down," press release highlighting Oct. 29–Nov. 1, 1982 poll, Nov. 25, 1982.

[31] Further support for this perspective might be found with the fact that even polls done within a year or two following the 1977 social security amendments (which were heavily publicized as keeping the system solvent well into the next century) showed that the public held a very pessimistic view about the long-term condition of the system.

[32] It should be observed that this does not necessarily reflect a favorable disposition toward the program, but possibly a pragmatic concern for how to provide for the millions of people now receiving benefits if the system were dismantled.

Social security is not perceived as just some Government welfare program; the worker of any age is constantly aware that he has a stake in it. The link between his regular social security payroll deduction and his eventual benefits is almost universally understood. Moreover, it is no longer a marginal deduction from his paycheck, of little consequence, but in fact represents for many the largest visible item of withholding. Thus, to be continuously told that the system is in trouble, while pouring heavy sums into it, has got to raise serious doubts among workers. If similar stories were to emerge about the financial trouble of a private company, the cautious investor might stop investing in it. He could take his loss and then forget about it. This, obviously, is not the case with social security—the distrustful worker must continue to make his tax payments. The younger worker might be expressing his disfavor with the system by voting for an optional system, but he also may be expressing his desire to find a hedge—a vehicle to keep his "options open."

Thus, while the question of what the projections for social security mean might be a matter of debate, and while experts and analysts of the system might argue about the necessity of taking various types of steps to address the potential problems, the image of insolvency, or more properly labeled "insufficiency," is clearly in the minds of the public. If the public is told often enough that something is a problem, regardless of whether it really is or not, people will come to believe it. Since 1973 or so, official sounding reports from the social security trustees, from study groups, from economists, from social security experts and others have made their way into the media warning that the system will have financial problems at some point in the future. Some focus on the long run, others on the short run, but the image of looming "trouble" is almost always there. It hasn't been a crisis type of alarm that has been sounded, since the system has never missed a payment date for its benefit checks, and as a consequence is not a headline maker—but it has been a good second page story over and over again. It is hard to imagine Congress ever allowing the system to miss its check date, but nonetheless the public appears to have a very substantial amount of apprehension about the system's longevity.

PAY-AS-YOU-GO VERSUS FULLY FUNDING SOCIAL SECURITY

The funding of the social security program is not a whole lot different from that of any other Government program. Current income goes out almost as soon as it comes in to meet current obligations. For most other Government programs, appropriations are made annually from the Government's general fund providing resources only to cover expenditures for the following year. Even the Government as a whole is financed on a current needs basis. Current income taxes and other revenues are used to meet current expenses. To the extent that current revenues are insufficient, the Government borrows only the amount needed to meet current expenses. No backup or reserve fund exists.

This "current" financing, or pay-as-you-go, approach is basically what the social security system follows. Granted, the system has a tax of its own, which is used only for its needs, and the tax is not progressive like the income tax. In addition, unlike other Government programs, any excess resources of the system can accumulate (and earn interest) for use at some later unspecified time. But when the financing of the system is viewed from a broad perspective, these differences are not all that significant in distinguishing the way social security is financed from other Government programs.

Since the inception of the program, this method of financing has been a smouldering issue. Critics contend that social security is not (and never has been) financed as a retirement or survivor benefit system should be. At the heart of the issue is the argument that a program which makes long-term commitments (despite the lack of a contractual arrangement) should not rely on the ability of the Government from one point in time to another to raise needed resources through taxation. Bringing the issue up to a current day setting, some argue that if the system had been fully funded all along, there would be little or no financing problems to discuss today. Tax increases or benefit cuts or any other measures to insure the financial security of the system would not be necessary, since the needed resources would have been accumulated, for the most part, long ago.

Peter J. Ferrara, a senior staff member at the White House Office of Policy Development, put it this way:

> If social security were supported on an invested basis, with each taxpayer's payments saved and invested for his own retirement, these potential bankruptcy problems would not exist. The maturity of the program would not make fi-

> nancing any more difficult or precarious because the initial generation of workers would have saved enough assets to finance their own retirement benefits. Since the taxes that current retirees had paid would have been saved for their own retirement, the decline in the fertility rate and changing demographics would not be a problem. With a trust fund rather than current workers assuring benefits, payouts would not be threatened by unemployment or sluggish wage growth. It should be obvious that a fully funded trust fund would make social security benefits much more secure than they are now. There would always be sufficient funds saved up and on hand to finance future benefit entitlements.[33]

Critics also argue that by not building up the necessary fund in advance of each cohort's use of it, the true cost of the benefit package is hidden until many years into the future. The tax rate can be kept relatively low in the early years of the program because on a pay-as-you-go basis you won't have to meet significant benefit expenditures until a later time. If, on the other hand, money were set aside well in advance of the benefit obligations, the public would be given a "better" picture of the ultimate cost of the "promised future benefits."

Opponents of this view, however, point out that if a huge fund were built up to finance the social security program, the Government would wind up being the owner of most of the Nation's major corporations, if not the major controller of much of the Nation's wealth. That would be one extreme, if in fact, the Government were to invest the huge fund back into the economy. If not directly invested in the economy, then one of two things likely would happen. If, for argument's sake, the Government simply built up the fund "on paper" without actually making use of the money—i.e., simply took it out of the economy, it very likely would reduce capital formation, and thus the growth of the economy. If, alternatively, it used the money to finance the other activities of the Government—such as defense spending, other social programs, etc., financed out the general fund of the Treasury—then income taxes and other sources of Government revenue very likely would be kept artificially low since the Government would be getting much of the resources it needed by borrowing from the social security trust fund. In other words, a large indirect public debt would arise. Thus, the true cost of other governmental activities might be made less visible. In essence, the more indirect the financing, the less painful it would appear to the public, and thus the true cost of the programs financed out of the general fund might go largely unnoticed.

If, in fact, this latter route had been chosen in the past, rather than having had artificially low social security tax rates, the income tax or public borrowing might have been kept lower than they otherwise were. Now that the costs of a maturing social security program are appearing, income taxes would have had to be raised, other Government programs cut, or public borrowing driven upward to meet the repayment of the Government's debt to the social security system. In abstract, because of the potential difficulties of these types of actions, the hypothetical full funding of the system might not have brought it any significantly greater financial security.

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[33] Peter J. Ferrara, "Social Security Reform, the Family Plan," Washington, D.C.: The Heritage Foundation, 1982, pp. 34 and 35.

Opponents further point out that the idea of building a large fund ignores past institutional behavior frequently shown by legislative bodies, i.e., their propensity to spend the moneys that build up in a fund for benefit liberalizations. While the initial motivation to build a fund might be underpinned by the desire to be prudent about financing future costs, public or interest group pressure might result at a later time in an alternative use of the fund. This, in turn, possibly could lead ultimately to a greater tax burden on future taxpayers.

(A) A "Bankrupt" Social Security Program—A Potentially Misleading Description

Technically speaking, the social security programs are "insolvent" when they cannot meet their benefit obligations on time. The payment date is prescribed in the Social Security Act, and if the conditions of the law cannot be fulfilled, the system in effect has defaulted on its obligations. However, the impression often left with the uninitiated by the term "insolvency" is that a far worse situation exists than is actually reflected in the current projections.

The use of the terms "bankruptcy" or "insolvency" to describe social security's financial problems are often misunderstood by the layman. He sometimes imagines that this means the system will come to a halt—that there will be no more resources available to pay benefits after a certain point. In a private business venture where poor investment choices are made, and the assets invested are exhausted, there may not be any more resources to meet the pending obligations. The venture's capital would dry up and the investors and creditors may not be able to obtain compensation.

This is not the situation confronting the social security system. Stories about its financial problems often mislead the reader because of his intuitive perception of what it means "to go broke," "become insolvent," or "collapse financially." In reality, what would happen if and when the financial problems emerge is that the social security benefit checks likely would be delayed, and each month thereafter they would be further delayed. Taxes would continue to come in, and they would accumulate in the trust funds until there were sufficient resources to meet all the benefit payments due for a particular month.[34]

Reports that the retirement program will be insolvent by July 1983, simply means that without remedial action, which is unimaginable, benefit checks would begin to be delayed at or about that time. The OASI trust fund would be depleted, but since the program is financed largely on a pay-as-you-go basis anyway, the fact that a contingency fund ran out of money is not as alarming as if the fund had been built up over the years to meet current benefit costs, and there was no money left in (or coming into) that fund.

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[34] The Congress obviously has never planned to allow the system to run short of funds, therefore, the law does not explicitly state how benefits are to be dispensed in the event the program's resources are insufficient to meet the benefits due on a particular payment date.

Even assuming the unimaginable happened, and Congress took no action this spring to shore up the social security system, this wouldn't mean that the system would be broke. It was not dependent on an invested reserve to begin with. It is interesting to point out that if one were to add up all the expected revenues to come into the system between now and 1990, the cash benefits program would only be short 3 percent of its expected outgo.[35] In other words, the deficiency when viewed on a pay-as-you go basis—which basically points out the bottom line of whether resources will be available to pay the benefits due for the period—is not dramatic when compared to what the program will spend in aggregate over the next 7 years. While the assurance that benefits would always be paid on time couldn't be given, if benefits were cut by 3 percent or taxes increased by a roughly corresponding amount, the program would meet all its obligations during the period. This is hardly the image cast by news stories and academic papers characterizing the situation by use of the terms "bankruptcy" or "financial collapse."

(B) Unfunded Liability

But if the system is not going broke in a literal sense, what does it mean when analysts refer to the fact that it has a huge "unfunded liability"?

The term "unfunded liability" is actually a misnomer when speaking about the social security system in its present form. Taken literally the term "unfunded liability" means that something is owed, but there is no money to pay it. The social security system generally might operate under the premise that a liability or commitment exists to pay a certain level or type of benefits, but as previously mentioned, from a purely legal standpoint there is no such "liability." There is nothing in the constitution that requires a social security program, and the payment of taxes does not create a contract between the Government and workers to pay a given amount of benefits when certain events occur. Radical change in the system is inhibited, not by contractual constraints, but primarily by political ones. The elimination of a financial deficiency can legally be accomplished as readily through benefit constraints as through the creation of new resources. Thus, the notion that the system has an "unfunded liability" is merely a descriptive device to show the magnitude of the system's potential financial problems.

The technique generally is used to describe the magnitude of the system's long-range imbalance. One or the other of two approaches is typically employed, with the fundamental difference between them evolving from the debate over whether the system should be financed on a pay-as-you-go or fully funded basis. These two approaches are referred to as "open-group" and "closed-group" methods. The open-group method is the one used most frequently for social security, whereas the closed-group method more often is used by insurance and private pension plans.

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[35] Based on estimates under the intermediate II-B assumptions of the 1982 OASDI trustees' report, modified to reflect the effects of the Tax Equity and Fiscal Responsibility Act of 1982. It would be 12 percent under pessimistic assumptions.

By a closed-group, actuaries generally refer to a fixed or limited group of people. Usually this means fixed in a time-frame sense—i.e., no new workers or contributors will join the group after a particular point.[36] In effect, it builds on the concept of a defined group of people (and/or their employers) taking complete financial responsibility for their pension requirements. The workers (and/or their employers) will make all the contributions to their plan to build up a supply of resources for their eventual pension income. If the projected supply of resources that will build up is less than the projected amount of benefits to be paid to these people, the difference is an unfunded liability.

Under the open-group method, the group of people in the plan is not fixed; it assumes that new entrants will continue to join the group in the future, and thus, that there will be a continuing supply of resources. It doesn't assume the buildup of a given supply of funds to be used for a given group of people. If the projected amount of resources flowing into the plan over a specified period of time is smaller than the projected flow of outgo during the period, the difference is the unfunded liability. Whether the benefits for *a particular cohort of people* in the plan during this period are fully financed by them and/or their employers is irrelevant.

Legislation enacted in 1966 requires the Secretary of the Treasury to report to Congress annually on the extent of the Government's outstanding liabilities. This report, commonly referred to as the Saltonstall report, in recognition of its legislative sponsor, contains projections of the unfunded liabilities of the social security program. While officially highlighting the unfunded liabilities on the open-group basis, the report also shows in footnote form the potential unfunded liability on a close-group basis.

By highlighting the system's financial deficiency as determined on the open-group basis, the report implicitly recognizes that a contractual commitment does not exist between the Government and covered workers. All it does is recognize the current benefit and financing provisions existing in the law at a particular time. If the law changes the rules of the game, the next Saltonstall report will alter the amount of unfunded liability. In addition, the report utilizes the 75-year valuation period used in the annual trustees' reports, thereby adopting what former social security actuary Robert Myers refers to as an "open-group, limited period" concept.[37] No assumptions are made about any income or outgo after the 75-year period, even though the benefit provisions would be in effect after that point.

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[36] What this technique does is provide a basis for evaluating the financial status of the plan for each cohort or generation of workers covered by it. Each cohort or generation of workers represents a "closed-group." The plan itself would not necessarily end.

[37] Robert J. Myers, "Social Security", 2d edition, Homewood, Ill.: Richard D. Irwin, Inc., published for the McCahan Foundation, 1981, p. 302.

The Saltonstall report shows this open-group unfunded liability, or more appropriately the amount of "unfinanced provisions of current law," in present value terms. Simply speaking, if one were to have two pots of money today, which when invested at interest, would equal the amounts of the projected aggregate income and outgo to and from the system during the period, you would have the present value of the system's projected income and outgo. If after adding any assets currently available to the income pot, there still is a shortage of resources, this difference is said to be the projected deficit or amount of the "unfinanced provisions."

The closed-group figures footnoted in the Saltonstall report are derived by assuming that no one under a certain age, as of the time of each report, would be brought into the social security system. The 1982 report, for instance, assumed that only persons 17 and older were in the group.[38] It then takes the present value of the projected income and outgo from and for those remaining in the system, adds the existing assets to the income side, and shows the difference between them as the unfunded liability of the system.

The following table shows both types of projected unfunded liabilities (or surplus) as reported each year in the Saltonstall report since 1970. As may be observed from the table, the closed-group unfunded liability with one exception has always been shown to be larger than the open-group deficiency, and thus critics of the pay-as-you-go financing procedure tend to emphasize it more than the latter, to show what they believe to be the "true" extent to which the system has overcommitted itself.

Table 10.—PROJECTED OASDI "UNFUNDED LIABILITIES"

[In billions of dollars]

Saltonstall report of—	Open-group basis	Closed-group basis
1970	3	415
1971	12	435
1972	[1] [140]	1,865
1973	176	2,118
1974	1,312	2,460
1975	2,027	2,710
1976	4,176	4,148
1977	4,787	5,362
1978	930	3,971
1979	848	4,225
1980	1,464	5,601

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[38] Earlier Saltonstall reports closed the group with different minimum ages, ranging from age 23 in the 1973 report to 15 in the 1980 report.

Table 10.—PROJECTED OASDI "UNFUNDED LIABILITIES"—Continued

[In billions of dollars]

Saltonstall report of—	Open-group basis	Closed-group basis
1981	1,555	5,858
1982	1,647	5,806

[1] Surplus.

Source: Office of the Actuary, Social Security Administration, Jan. 13, 1983.

By using the closed-group figures, even if Congress were to resolve the financial problems of the system (i.e., on a pay-as-you-go basis) critics would continue to argue that the system has a financial deficiency because there would still be an "unfunded liability" shown.

The basic point is that while a "good case" might be made that the system should be financed differently, there is no right or wrong way. Some critics characterize the current funding mechanism as "fundamentally flawed," but what they really are doing is expressing a value judgment about how the system should be financed—their argument would exist even if projections showed the system could meet all its future obligations.[39]

(C) What Would It Take to Fully Fund Social Security?

In 1979, the Office of the Actuary of the Social Security Administration put out an actuarial note to illustrate the possible changes that would have to be put in place to accomplish full-funding of the OASDI program.[40] One important point mentioned early on in the study is that "full-funding" in private pension plans does not always literally involve complete advance funding. Like the social security system, private pension plans often have a transitional period when they start up, in which the benefits of the first few generations of retirees are not completely funded. These early recipients often did not have a chance to work for a full career under their plans, but in fact receive full-rate benefits, which are often benefits greatly in excess of the contributions they or their employers made. This is frequently referred to as a "past service liability." The major difference between this "startup" phase of a private pension plan and that of the social security system is that these early unfunded costs are amortized or liquidated in a private plan by the payment of additional contributions to the fund (i.e., above what might be considered "normal") for a specified time period. The social security system has neither a schedule to amortize this so-called past service liability, nor a future tax schedule to fully fund future workers covered by the program.

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[39] Assuming that the system remained less than fully funded.

[40] Joseph A. Applebaum, "Some Effects of Fully-Funded OASDI," actuarial note No. 97, Social Security Administration, September 1979. It should be kept in mind that while the study is more than 3 years old, the program has not changed much since then, nor have the longrun financial projections of the system. Thus, the analysis would not likely have produced dramatically different results if the study had been conducted more recently.

The actuarial study first determined what level of taxes would fully fund the eventual retirement benefits of persons ages 19 to 23 in 1979 (assuming this to be the approximate age span of new workers entering the work force). This level of contributions or taxes is what actuaries refer to as "normal cost." The study showed this amount to be 13.72 percent of payroll (6.86 percent on employee and employer each). This is in contrast to an OASDI tax schedule that ranged from 10.16 percent in 1979 to 12.40 percent in 1990 and thereafter (12.19 percent on average for the following 75-year period).

The study then illustrated two possible approaches to amortizing the accrued unfunded liability of all older workers. One called for it to be written off over a 30-year period, while the other would have written it off over a 75-year period. The following table shows what the tax schedule would have had to be, beginning in 1979, under these two approaches.

Table 11.—HYPOTHETICAL TAX SCHEDULE FOR FULLY FUNDING OASDI

OASDI COMBINED EMPLOYEE/EMPLOYER TAX RATES

[In percent]

Calendar years	Present law	Normal cost and accrued liability, amortization over	
		75 years	30 years
1979-80	10.16	18.35	24.40
1981	10.70	18.35	24.40
1982-84	10.80	18.35	24.40
1985-89	11.40	18.35	24.40
1989-2008	12.40	18.35	24.40
2009-35	12.40	18.35	13.72
2054 and after	12.40	13.72	13.72

The next table shows what the trust fund balances were projected to be under the two approaches in terms of how much assets would be in the fund at the beginning of each year as a percent of that year's expenditures.

Table 12.—HYPOTHETICAL OASDI TRUST FUND RESERVES RESULTING FROM FULLY FUNDING OASDI

Calendar year	Ratio of funds at beginning of year to expenditures in year	
	75-year amortization	30-year amortization
1979	0.30	0.30
1980	.77	1.17
1985	4.35	7.66
1990	7.87	13.96
1995	11.41	20.29
2000	15.21	26.95
2005	18.33	32.72
2010	20.41	35.61
2015	21.41	33.73
2020	21.56	31.40
2025	21.49	29.33
2030	21.85	28.17
2035	22.78	27.84
2040	24.30	28.19
2045	25.83	28.44
2050	27.15	28.42
2054	28.27	28.27

In summary, the study showed the normal cost of fully funding the benefits of new entrants to the work force would have had to be somewhat (but not much) higher than the future tax rates scheduled in the law—13.72 percent (employee-employer combined) instead of an average 12.19 percent for the following 75-year period. However, in order to liquidate the accrued unfunded liability for older persons already in the work force or receiving benefits (persons age 24 and older as of 1979) the tax rate would have had to be increased immediately to more than 24 percent, assuming the liability were written-off over a 30-year period, or to more than 18 percent if written-off over a 75-year period.[41]

Under the 30-year amortization option, the assets built up in the trust funds were projected to peak in the year 2010, with almost 36 year's worth of benefits being on hand at that point (in contrast to the less than 2 months' worth presently on hand). Eventually the reserves would have stabilized and remained at a level equal to about 28 years' worth of benefits. Under the 75-year amortization option, reserves would have risen steadily throughout the 75-year period, reaching a level equal to 28 years' worth of benefits at the end of the period.

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[41] After the amortization period, the normal cost tax rate of 13.72 percent would become effective.

The actuarial note concluded with the following comment about trust fund accumulations of this magnitude:

> It may be of interest to note that the trust funds would grow from about 2 percent of GNP in 1979 to about 160 percent of GNP by the end of the 75-year period and the under the 30-year amortization they reach a peak of about 180 percent of GNP. This is an enormous fund, and the question arises as to how to invest it; for example 180 percent of the calendar year 1978 GNP would be about $3 trillion. This is higher than the combined amounts of the national debt and the total equity values and outstanding debt of U.S. corporations.
>
> . . . Clearly, such a funding policy would not leave the Nation's economy unaffected. Thus, the relationship of trust fund size and GNP presented are, to some extent, artificial. However, even with this caveat, these figures do draw attention to the significant economic consequences of full funding.

Looking toward the future from a broad point of view, the system represents a procedure by which rights to consume are given to the beneficiaries (in the form of monthly benefit checks) at the expense of the workers (whose rights are taken from them in the form of taxes). However, the goods and services that are to be consumed by either the beneficiaries or the workers would in any event have to be produced or provided at the time that they are consumed or shortly before then. Since it is not possible to stockpile services (like doctor's visits, public transportation, etc.) and many goods cannot be stored for more than a short period, it could be said that the benefits that will be paid in any year in the future will have to be financed by essentially the workers in that year. Any large amount of prefunding will not guarantee the availability of goods and services.

(D) Full Funding Usually Is Only One Aspect of a Larger Objective

While some critics of pay-as-you-go financing might be striving for such large trust fund accumulations, the desire for full funding more frequently is only one element of a broader goal—to alter fundamentally the social security system, if not to replace it in whole or part with a private sector alternative. The discussion of how "unfunded" social security has become is simply the stepping off point to show "how necessary it is" to move to a whole new process for dealing with the economic needs arising from retirement, death, or disability.

Many critics of the pay-as-you-go approach would be even more unhappy with the system if it were fully funded, since even larger amounts of capital would wind up under Government control. Often their real concern is that they do not believe the system is conscious enough about matters of equity. On the financing side they believe it is unfair (and possibly irresponsible in the minds of some) to pass the burden of meeting the income needs of the nonproductive portions of one's lifetime on to future generations of workers. From the benefit side the complaint is that the program does not provide benefits according to what a person paid into the system. The fact that the system pays higher relative benefits under situations of "presumed" greater need is perceived to be inappropriate for a system heavily promoted in the past as a form of "insurance," and now viewed as the Nation's basic income protection program for its workers.

They want a fully funded income protection program for what usually goes along with it; fiscal prudence or responsibility being only one element thereof. Of possibly greater importance is that they want a more direct link established between a person's "own productive efforts," through what he actually sets aside for retirement and the risks of early death and disability, and what he would receive if and when those events occur. While the Government might be the appropriate agent for financing and dispensing welfare benefits, they see little reason why the private sector could not provide basic retirement annuities and other income-protection "insurance" for the vast bulk of the Nation's work force and their families.

A BENEFIT STRUCTURE WITH BOTH INSURANCE AND WELFARE FEATURES

Social security is not insurance or an annuity program in any form recognizable to the insurance industry, private actuaries, bankers, pension fund administrators, or other money managers in the private sector. It never has been, although people often attempt to cast its original form as such. However, it is frequently viewed as a very broad form of income protection called social insurance. Under this concept, the group to be "insured," in this case 90 percent of the workers of the Nation, pools resources to meet an unconventionally wide variety of individual and family circumstances arising from the loss of a worker's earnings due to retirement, death, or disability. As such, the program has what many refer to as a mixture of insurance (or related annuity) and welfare features.

One of the earliest discourses on the concept of social insurance with regard to the U.S. social security system came from Reinhart A. Hohaus, an actuary with the Metropolitan Life Insurance Co., and member of two social security advisory councils, who wrote in a 1938 Society of Actuaries publication:

> Social insurance . . . aims primarily at providing society with some protection against one or more major hazards which are sufficiently widespread throughout the population and far-reaching in effect to become "social" in scope and complexion. Usually these risks are not many in number. Yet, if not guarded against through some organized means, they produce large dependency problems that take their toll in terms not only of financial but of human values as well.
>
> Directed against a dependency problem, social insurance is generally compulsory—not voluntary—giving the individual for whom it is intended no choice as to membership. Nor can he as a rule select the kind and amount of protection or the price to be paid for all. All this is specified in the plan, and little, if any, latitude is left for individual treatment. Indeed, social insurance views society as a whole and deals with the individual only as so far as he constitutes one small element of that whole. Consistent with this philosophy, its first objective in the matter of benefits should, therefore, be that those covered by it will, so far as possible, be assured of that minimum income which in most cases will prevent their becoming a charge of society. Not until this is accomplished should financial resources (whatever, if anything, may remain of them) be

> considered as available to provide individual differentiation aiming at equity.
>
> . . . just as considerations of equity of benefits form a natural and vital part of operating private insurance, so should considerations of adequacy of benefits control the pattern of social insurance. Likewise, as private insurance would collapse if it stressed considerations of adequacy more than those of equity, so will social insurance fail to remain undisturbed if considerations of equity are allowed to predominate over those of adequacy. . . .
>
> The foregoing need not necessarily imply that all considerations of equity should be discarded from a social insurance plan; rather the point is that, of the two principles, adequacy is the more essential and less dispensable. [From Reinhard A. Hohaus, "Equity, Adequacy, and Related Factors in Old-Age Security," The Record, American Institute of Actuaries, vol. 37 (1938); excerpted from Robert J. Myer's book, Social Security (2d edition), Homewood, Ill.; Richard D. Irwin, Inc., 1981, pp. 869–870.]

Hohaus' article provided one of the most highly regarded descriptions of the social adequacy concept imbedded in social insurance.[42] His principal thesis was that the primary objective of social insurance was to provide a level of income protection for all in society sufficient to meet some reasonable "minimum" standard-of-living, that it has to do so by lessening the prevalence of "dependency" (the need for welfare), and to accomplish this it had to emphasize social adequacy considerations over those of individual equity, and that such a system had to be compulsory for everyone.

Over the years, critics have frowned on the use of the term "insurance" to describe the program because it has so many features that cannot be found in the traditional forms of private insurance, the most notable difference being that benefits are only remotely based on one's contributions as is the case with insurance or private annuities. Supporters, however, are quick to argue that like insurance, social security evolves from a pooling of resources derived from workers, and eligibility is earned through credits accrued from their work. It is not a welfare program which conditions eligibility solely on the basis of need.

Nonetheless, some critics of the program have repeatedly taken exception with the use of the image of private insurance to give the social security program an "aura of respectability." They feel that characterizations of the program as a form of insurance have misled the public about how the program operates, and that it has created a false sense of security about the system's financial well-being. They further feel the system is basically flawed, because it has attempted to mix two objectives together that are fundamentally inconsistent with one another.

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[42] Martha Derthick, Policymaking for Social Security, Washington, D.C.; The Brookings Institution, 1979, p. 143.

Supporters of the program argue that it is this very mix which has made the program so successful. Social security's role in establishing reasonably adequate standards-of-living for the elderly generally, and in bringing about a very substantial reduction in poverty levels among the elderly, could not have been accomplished unless the worker understood that his support of this system would eventually establish certain rights to benefits for him—his support had to be based on his having a stake in the system. The fact that the program lacks the high degree of individual equity and precision between contributions and benefits that exists in traditional forms of private insurance does not outweigh the social value achieved by avoiding the ill effects of having a high degree of perceived "dependency" in the Nation. In a broad sense, they see the program as insuring society against the adverse social effects and individual deprivation of having a high proportion of the elderly in a clearly perceived state of dependency.

(A) The Insurance or Annuity-Related Elements

There is no simple way of distinguishing the insurance, annuity, or private pension features of the social security program from its welfare features. Social insurance mixes these two types of income protection together in such a way that the end product takes on a distinct character of its own. Thus, the frequently mentioned idea of separating the program's insurance and related "private sector" features from its welfare features often leaves the mistaken impression that these elements can be easily identified. Often, however, certain aspects of the program that are labeled as welfare are found (in some form) in private sector, income protection instruments. Therefore, this section and the next one attempt only to illustrate the elements of social security that are conceptually related to private sector instruments or to welfare programs.

First, it is important to recognize that private sector instruments take on different forms. An insurance plan is not the same thing as an annuity or pension plan. Insurance is protection against rather unlikely events, whereas an annuity often (although not always) is directed toward events that are expected to occur in one's lifetime—e.g., retirement.

Probably the key insurance-like concept imbedded in the social security system is that there is a "pooling" of resources to meet unlikely, but possible, adverse events. Each member of a large group of people puts a small amount of resources into a pool so as to guard against catastrophic events which could affect any one of them. Not everyone in the group will encounter those events, but there is no way of knowing who the affected individuals will be in advance. Certainly, social security benefits for early death or disability best resemble this aspect of private insurance.

Second, like private insurance, social security requires a payment (a contribution) to help supply the resources for the pool. It is intended that only workers who contribute (pay taxes) should eventually become "insured" for social security protection. A person who doesn't work in employment covered by the system cannot become "insured" on his own record.[43]

Third, the payment of benefits is not conditioned on need. The displaced worker can be rich or poor—it doesn't matter. If the event occurs for which the social security program provides insurance (retirement, death, or disability) the individual will receive benefits. Critics often argue that this is not true. They argue that the program's earnings test is a back-door form of means-testing because if the recipient has earnings, it potentially can cause a reduction of benefits (and the higher one's earnings, the more likely the benefits will be greatly reduced or completely withheld). However, what is often ignored in this criticism is that the program "insures" against lost earnings, not lost income. If a person loses his life's savings in the stock market, the system doesn't respond to that loss. If a person's house burns down, the system doesn't respond. It responds if earnings are lost as a result of one of three events: retirement, death, or disability—that is what it "insures" against.

The annuity or private pension-related features are more closely aligned with the retirement portion of the program. While there are very different types of private pensions (and their funding is very different), the basic identity the social security program has with them is that it is a device for planning for one's income needs during retirement. Second, even though the social security benefit formula is tilted to favor low-wage earners, as in private pensions the larger the amount of earnings the worker had over his career, the larger will be his monthly benefit amount (his "annuity"). Third, as in private pensions, the longer one works, the larger will be the social security benefits, since social security determines a worker's average earnings by taking a large number of years into account (27 years for a worker reaching age 62 in 1983).[44] In effect, this causes a "negative" length of service adjustment to the benefit, by including years of no earnings or low earnings into the social security averaging computation for persons who have worked intermittently over their careers or for a relatively short period of their lives.

(B) The Welfare-Related Features

Probably the most significant feature of the social security program distinguishing it from insurance or annuity plans is that its benefits are neither directly nor closely related to one's (or one's employer's) contributions to the system. While benefits are determined from an "average" of a worker's past earnings, the tax rate that was applied to those past earnings was not determined based on an actuarial calculation of the eventual cost of the individual's cash benefits. Since the system follows a pay-as-you-go process to meet its financing needs, the cost of an individual's benefits is irrelevant to his tax rate—the aggregate or "group costs" of paying all current beneficiaries' benefits is the deciding factor.

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[43] However, he may receive a benefit as an eligible dependent of an "insured" worker as part of the "insured" worker's benefit package.

[44] By 1991, the averaging period will lengthen to and become fixed at 35 years for workers who become eligible from then on.

The fact that the tax rate is determined based on "group" costs is not in and of itself a feature distinguishing social security from its private-sector counterparts—this feature also is found in the private sector in "defined benefit" pension plans. Further, it would be difficult to label this as a welfare feature since rich people also are recipients of the resources obtained through "group funding."

But what is often labeled as welfare is the so-called "intergenerational transfer" element of the program. Since the program's tax rates were very low in the first two or three decades of the program's existence (based on the "group" costs of the program at that time—a very low amount), the first few generations of recipients have and will continue to receive what are considered to be relatively high benefit levels, given their contributions to the system. They were asked only to contribute such amounts as would meet the fairly low costs of the system during its first few decades of operation. In order to allow these early recipients to have fairly adequate benefit levels, benefit amounts were (and continue to be) set far above what might have been payable if they were based solely on the contributions they made to the system. The idea was to provide as substantial or "adequate" a benefit level as possible. The "need" to provide a minimum floor of protection for these early entrants was considered more important than concerns about exorbitant rates of return on contributions—the latter being considered a significant, but not dominant, equity concern. As the system matured (and continues to do so) with more and more of its early covered workers now becoming recipients, the cost of the system is rising and the tax rate on current workers is rising accordingly. In effect, early entrants to the system have received a "bonus" in the form of an extremely favorable "rate of return" when compared to the expected rates of return that current and future generations of workers will receive.

It should be noted that the procedure of establishing benefit levels for early recipients far in excess of what contributions would dictate is also often found in private pension systems. This was brought up in the previous section in the discussion of how "past service liabilities" were amortized by private pension plans—these past service liabilities also arose from paying benefits that exceeded what would have been consistent with the contributions made by, or on behalf of, the early entrants to the private plan (the cause being that they too did not have a chance to work for a full career under the private plan). While some might argue that this represents just as much a welfare situation for these private plans, the basic point is that it is not unique to the social security system.

Another prominent welfare-related feature is the weighted benefit formula, which provides higher relative returns on contributions to low-wage earners than high-wage earners. The premise is that a low-wage earner uses a larger percentage of his earnings to meet the basic necessities of living. Since the program has the goal of providing benefits sufficient for a "minimum" level of subsistence, more benefits are provided per dollar of contributions to low-wage earners when they lose their earnings. An annuity program, on the other hand, would provide the same return per dollar of contributions (either made by the employee or employer) regardless of a worker's relative earnings level.

Yet another major welfare-related feature is the provision allowing "auxiliary benefits" to be paid to members of a worker's family. These are paid in addition to what the worker receives on the presumption that a family needs more than a single individual. While insurance for members of a family is not an idea conceived with the creation of social security, the fact that it is not paid for by the family's wage earner (since his tax rate is no higher than a single worker's) often causes it to be viewed as an income transfer or welfare feature. In a sense, the single worker is asked to subsidize the "larger" needs of workers with families.

Still another aspect of the program often labeled as a welfare feature is the "earnings test." As previously mentioned, the earnings or retirement test reduces or precludes benefits to people who continue to work at substantial wage levels after they file for benefits (others never file for benefits because they know the earnings test would preclude them from receiving benefits). In practice, the earnings test tends to have its largest impact on relatively higher wage earners. Thus, it is often viewed as a means of avoiding "unnecessary" payments to people who "don't need" them—a concept imbedded in most welfare or public assistance programs.

(C) The Controversy

Bert Seidman, director of AFL-CIO's Department of Social Security, recently wrote "social security is under the most intensive assault in its 47-year history. . . . The enemies of social security have sought to perpetuate the myth, as they have throughout the life of the program, that social security was a 'bad buy,' that workers could purchase better protection in the marketplace than they get from this Federal program, and for the same dollars. . . ."[45]

While the emotion in this statement may be highly charged, it is probably fair to say that the basic tenets of social security are undergoing some of the heaviest scrutiny and reevaluation that they have ever encountered. To date this scrutiny has not manifested itself in any strong legislative alternatives to the present system, but more and more academic and interest-group papers have surfaced, posing not so much ways to fix the current system, but ways which would completely alter the basic philosophical concepts underpinning it.

At issue are the perceived welfare features of the system. Peter Ferrara calls the mix of insurance and welfare features an "inherent contradiction."[46] He argues that because the program has social welfare features, it creates a lot of inequities among its recipients, thus distorting its insurance or annuity functions, and because of its insurance or related annuity features, it carries out its welfare functions poorly.

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[45] Bert Seidman, "Social Security: Keeping Faith, " AFL-CIO American Federationist, March 1982.

[46] Peter J. Ferrara, Social Security: The Inherent Contradiction, San Francisco, Cato Institute, 1980.

To cite Ferrara:[47]

> The past higher returns of the social security program were . . . due to the transitory effects of the startup phase and are eliminated as the program enters the mature stage. The problem of the inferiority of social security to private alternatives thus only appears in full force in this mature phase of the program. . . .
>
> Clearly, social security is inferior to private alternatives in both monetary and qualitative aspects for young workers entering the program today. Now that it has reached the mature stage, social security will remain inferior to private alternatives for all future generations. It would appear that basic and fundamental reform is absolutely necessary on these grounds alone.
>
> These many social security problems can be laid to its operation on a pay-as-you go, rather than an invested, fully funded basis, which mode of operation originated with the payment of unearned and unpaid-for benefits to those who were thought to be in need in the early years of the program. Such pursuit of welfare objectives increasingly has interfered with the pursuit of the program's intended insurance objectives. . . .
>
> Many of the welfare benefits paid through social security are wasted on the nonpoor because the program does not have a means test. But the program lacks such a test because it pays out substantial insurance benefits, which are considered earned by everyone who paid for them, and therefore to be paid out regardless of need. Mixing welfare benefits with these insurance benefits therefore means that the welfare benefits cannot be made subject to a means test either. The insurance elements in social security thus cause it to be a wasteful welfare program.

He and other critics point out that the intergenerational transfer has caused the early recipients of the program to benefit at the expense of later workers who will have to meet the "unfunded costs" of current and early recipients. Single workers have to provide the resources to pay auxiliary benefits to family members of other workers, and above average wage earners will soon get "poor" rates of return so that below average wage earners can get "high" rates of return.

They further argue that since the system does not have a means-test, it doesn't perform its welfare functions well. Its tilted benefit structure often distributes benefits to the relatively well-off segments of the population at the expense of younger workers with families who have to stretch to make ends meet. In addition, it often provides large dependent's benefits to beneficiaries who have a substantial retirement income, once again at the expense of not-so-well-off current workers.

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[47] Peter J. Ferrara, "Social Security Reform, The Family Plan," Washington, The Heritage Foundation, 1982.

Finally, they argue that the social security tax discourages employment, since it's a large tax on payroll, and it encourages consumption, thus reducing savings and capital formation which would lead to greater societal wealth in the future.

Supporters of the system argue that it was not set up to be an insurance or pension plan, or to cite Hohaus, anything like them. They argue that if the system's welfare functions were carried out by some other program, that other program would not be very successful at keeping down the overall level of "dependency" in society. Welfare programs do not fare well in the allocation of public resources. They contend that only by giving all workers a stake in the system could it remain a strong vehicle for addressing the problems of poverty and dependency among the elderly. They further argue that while the program does not have a high degree of equity and precision between the taxes paid and benefits received, it achieves "rough justice." For instance, while critics often view the intergenerational transfer as causing an "excessive" rate of return for past and current beneficiaries, it ignores the fact that the low tax rates which prevailed in the early years of the program were on top of the "intra-family" support that went on simultaneously when today's beneficiaries were young and had to support their parents. Similarly, the relatively large return on contributions given to a low-wage earner when he retires (i.e., the progressive benefit structure) is balanced by the high percent of a low-wage earner's income that must be contributed to the system when he works (i.e., the regressiveness of the payroll tax).

Further, while there may be some waste in the payment of certain social-type benefits to persons of substantial means, they do not view this as a high price to pay to avoid the imposition of a means test. They feel that the social security system avoids social or income stratification of the elderly segment of the population, which would force many people to perceive themselves as "having to go on the dole" for some of their retirement needs after having worked and been self-sufficient their whole lives.

Finally, they counter the charge that social security encourages consumption over savings, arguing that the mere existence of social security has made people more aware of the need to save for their eventual retirement needs.

PERCEPTIONS OF THE VALUE OF SOCIAL SECURITY

Probably the only concrete conclusions one can draw about the public's perception of the value of social security is that it knows little or is grossly ill informed.

One example of this can be found in a June 1981 CBS/New York Times poll which showed that only 15 percent of its respondents expected to get more back from the system than they put in.[48] This is rather amazing given the fact that a worker filing for benefits at age 65 in January 1982, who contributed the maximum taxes each year since 1937 (when the tax was first levied) would get his contributions back in only 22 months. A similar worker who had steady average earnings since 1937 would get his contributions back in only 15 months.[49] When the same poll asked how much money a new retiree had put into the system, if over the years he contributed the maximum tax, and gave the respondents multiple choices ranging from less than $15,000 to more than $100,000, 85 percent said they didn't know or had no opinion. The answer should have been under $15,000.

Yet another example can be found in a poll conducted by the Roper Organization in June 1981. Some 2,000 adults were asked how much out of each $100 of social sucurity taxes was consumed by administrative expenses rather than actual benefits. Over 40 percent of the respondents replied that half or more of the taxes were eaten up by administrative expenses. Almost 75 percent of the respondents replied that 20 percent or more was consumed by administrative expenses. The correct answer would have been 1.3 percent.[50]

The point of these two examples is not to make a case for what a "great deal" social security is. Others, as previously noted, argue that these current and past enormous "returns" are the very thing that will cause numerous future recipients to have poor "returns". The basic point is that people generally do not know much about their "social security worth."

Given the very complex nature of the system, this is not altogether surprising. The cash benefits programs draw their legislative authority from more than 30 different sections of the Social Security Act (some having more than 20 subsections) as well as many provisions contained in other separate laws enacted over the past four decades. For most people, the basic benefit formula alone is incomprehensible, never mind the hundreds of nuances and exceptions which can affect a person's benefits. Further, while a worker pays the social security tax with every paycheck, he rarely asks about what specific income protection is available to him. And the Social Security Administration never voluntarily provides it to him on an individualized basis.

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[48] From a press release issued on July 7, 1981, CBS News poll, and the New York Times, describing their respondents' "Social Security Expectations."

[49] Based on a report by the Congressional Research Service of the Library of Congress entitled "How Long Does It Take for Current Retirees To Recover the Value of Their Social Security Constributions?" report No. 82-76 EPW, Apr. 20, 1982. The statistical analysis upon which the report was based was done by the Office of the Actuary of the Social Security Administration.

[50] From a press release issued on July 8, 1981 by the Roper Organization, Inc., entitled "Public Has Inflated Idea of Government Waste, Roper poll suggests."

The issue is further muddled by the very different "signals" on the program's value given by its protagonists and antagonists.

(A) Different Philosophical Values

Is social security a good or bad deal? There is no simple yes or no answer to that question. The different responses given are often contradictory, or at least appear as such. They often are heavily ladened with value judgments. reflecting differences of opinion about what the system should do. At the extremes, one group strives for a "pure" insurance or annuity program, while the other pursues a program of "income transfer" from the relative "well-off" to the "not-so-well-off." Each presents arguments of "value" intended to bolster these pursuits.

Since social security today is a program with social as well as insurance goals, it is not comparable to a private annuity or insurance system. If social security were a strict annuity system, each worker's potential return on contributions would be the same, and it would be reasonable to evaluate its "worth" against alternative plans. However, as a "social insurance" system, social security is deliberately designed to give a better return on contributions to some workers than others.

Hence, some analysts of the program will argue that it is incorrect to evaluate the program's worth by simply measuring the speed or rate of return on a worker's contributions, because the program's social features distort such computations. Others would argue that it is very appropriate to evaluate the system this way because these social features place a drag on some workers' potential return from the system, which is reflected in the relatively wide variances in returns on contributions

Thus, the answer to a question about the value of social security benefits to the Nation and the individual depends heavily on one's view of what the system ought to accomplish.

(B) The "Return on Contributions" Perspective

Many people have the general impression that because they have been paying social security taxes for all or most of their working lives, they could not possible get back what they paid in to the system. This perspective has been growing in recent years with the continuous barrage of news stories about social security's financial difficulty. It is probably also influenced by the fact that social security tax rates have risen substantially over the years, and many people now feel that their social security tax payments have been so large it would be impossible to get back what they put in.

This distorted perception of the aggregate amount of one's contributions was clearly reflected by the June 1981 CBS/New York Times poll in a followup question to the one about what "maximum" contributions were. This subsequent question, posed to those who had no opinion on the first question, gave a narrower range of possible responses to the question of what "maximum" contributions could have been up to that point. Only 9 percent of the respondents guessed correctly that the most a worker could have put into the system was an amount under $15,000. Some 78 percent guessed "too high," with 36 percent giving a response that was more than double what maximum contributions could have been (i.e., over $30,000).

This perspective may be, in part, a result of people not wanting to believe that they are receiving something that they haven't paid for. To tell them that they are getting or will get back more than they paid into the system is to imply that they are somehow "taking advantage" of the system or are receiving welfare. It is sometimes more comfortable to believe that others will benefit excessively or that the system "wastes" money, e.g., on "overpaid and inefficient bureaucracies." But the fact is that social security has paid enormous returns on contributions for years, and likely will continue to do so for quite a few years into the future. This is the nature of a pay-as-you-go system, as Peter Ferrara so clearly described. In the early years of a pay-as-you-go system, there are many more workers than recipients—the ratio of workers to recipients is higher than it ultimately will be because the number of recipients is relatively low. Thus, the level of taxation can be kept fairly low, because the cost of providing benefits in the early years can be spread among many workers. The result produces very large returns on contributions initially, which fall sharply as the program matures.

(1) RETURN ON CONTRIBUTIONS TODAY

Data prepared by the Office of the Actuary of the Social Security Administration in 1982 showed that, on average, workers retiring at age 65 in January 1982 would get the nominal amount of their contributions back in no more than 22 months.[51] If only the retirement and survivor portion of their taxes were considered (which provides a more appropriate comparison to the retirement benefits), they would get their money back even quicker—in no more than 17 months. If the employer's share of the tax were factored in, the projected payback times would double, but they, too, still would be relatively short, given that an average man, age 65 in that year, would be expected to live 14.5 more years; an average woman, 19.1 more years.[52] The following table illustrates.

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[51] These examples assume that the workers involved had been paying taxes since 1937. This data was summarized in the Congressional Research Service report on "How Long Does It Take Currrent Retirees To Recover the Value of Their Social Security Contributions?" loc. cit.

[52] According to estimates of life expectancy from SSA's 1981 "life tables," prepared by the Office of the Actuary.

Table 13.—TIME IT TAKES TO RECOVER NOMINAL AMOUNTS OF SOCIAL SECURITY TAXES

[Age-65 retiree in January 1982—In months]

	Only worker's share of tax		Both worker's and employer's tax	
	OASDHI taxes	OASI only	OASDHI taxes	OASI only
Worker alone:				
Minimum[1] wage earner	13	10	27	21
Maximum[2] wage earner	22	17	43	33
Worker with spouse:				
Minimum[1] wage earner	9	7	18	14
Maximum[2] wage earner	15	11	29	22

[1] The "minimum wage worker" is assumed to have earned the Federal minimum wage consistently since 1938.

[2] The "maximum wage earner" is assumed to have always earned an amount equal to the maximum amount creditable for social security purposes, i.e., the taxable earnings base.

Source: Congressional Research Service, "How Long Does It Take Current Retirees . . . ," loc. cit.

It is frequently argued that this array of payback times is oversimplified, because if a worker could have invested his tax money at interest, instead of paying it into the social security program, the cumulative amount of such funds would have been a lot larger by the time he retired than the nominal amount of his contributions. Thus, it is sometimes suggested that a hypothetical interest rate should be factored into the analysis to show what the contributions would have amounted to if they had been accruing interest from the time they were made.

However, even when the payback times are computed in this manner, they show that most workers retiring now are still likely to get back substantially more than they would have received had they put their money elsewhere. The following table illustrates the potential payback times for illustrative workers who retired last year at age 65, assuming their contributions had been allowed to earn roughly the same interest rates which the social security trust funds earned over the years. While some workers would have earned higher interest if they had been allowed to put their money elsewhere, others are likely to have earned less. If they had invested their money unwisely (or were unlucky), they may even have lost some or all of their principal. These examples attempt to set forth a "middle ground" perspective.

Table 14.—TIME IT TAKES TO RECOVER AMOUNT OF SOCIAL SECURITY TAXES PLUS INTEREST

[Age-65 retiree in January 1982—In months]

	Only worker's share of tax		Both worker's and employer's tax	
	OASDHI taxes	OASI taxes	OASDHI taxes	OASI taxes
Worker alone: [1]				
Minimum wage earner	30	25	60	49
Maximum wage earner	45	37	90	73
Worker with spouse: [1]				
Minimum wage earner	20	16	40	33
Maximum wage earner	30	24	60	49

[1] Minimum and maximum wage earners are described in footnotes to previous table.

Source: Congressional Research Service, "How Long Does It Take Current Retirees . . . ," loc. cit.

Even in the "worst case"—the single, maximum wage earner—the time it would take to recover OASI taxes is only a little more than 6 years. This would be less than one-half of the remaining lifetime of the average male retiree in that year; less than one-third of the remaining lifetime of a female retiree.

(2) RETURN ON CONTRIBUTIONS IN THE FUTURE

These enormous current returns on contributions, however, cannot be sustained indefinitely into the future. The ratio of workers-to-recipients has been falling as the early and recent generations of workers covered by the system have entered the rolls. Furthermore, the system is playing an even larger role today in providing retirement incomes than it did in its early years—benefits for current retirees represent a substantially greater amount of a worker's pre-retirement earnings than they did for those retiring 20 or 30 years ago. The tax rates levied on current workers, therefore, have had to rise substantially to finance this more mature program. As a consequence, payback times will increase substantially for workers retiring over the next couple of decades, and the system's relative returns on contributions will decline.

An analysis of the lengthening of the payback times and the decline in future returns on contributions was prepared for the recent National Commission on Social Security Reform and summarized in an August 1982 memo given to the Commission's members.[53]

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[53] Memorandum No. 45 from Robert J. Myers, Executive Director, to Members of National Commission on Social Security Reform, "Money's-Worth Comparison for Social Security Benefits," Aug. 12, 1982. The analysis was done by Robert J. Myers and Bruce D. Schobel who was on loan to the Commission from the Office of the Actuary of the Social Security Administration.

The analysis showed that under the intermediate assumptions in the 1982 trustees' report, payback times for retirement benefits would increase very substantially as one looked out into the future. To illustrate, the analysis projected payback times for both the single, age-65 retiree who had average steady earnings over his lifetime, and the single retiree who always earned an amount equal to maximum earnings creditable for social security purposes.

The following table from the memo points out that the payback time for the average-earner case would be almost three times as long for the 2025 retiree as it was for the 1980 retiree. It would take the 2025 retiree about 12½ years to recover the contributions he and his employer made to the system, in contrast to the 4½-year payback time for the comparable 1980 retiree. Similarly, it would take the maximum earner retiring in 2025 about 18.5 years to recover the contributions, in contrast to the 5-year payback time for the 1980 retiree.

Table 15.—PAST AND PROJECTED FUTURE PAYBACK TIMES

[Age-65 retirement cases—In months]

Year of attaining age 65	Average-wage earner		Maximum-wage earner	
	Single person	Married couple	Single person	Married couple
1960	19	13	24	16
1965	32	22	38	25
1970	42	28	48	32
1975	49	33	54	36
1980	54	36	60	40
1985	84	56	98	66
1990	100	67	120	80
1995	115	77	143	96
2000	127	85	162	108
2005	138	92	178	119
2010	144	96	192	128
2015	149	99	204	136
2020	148	99	215	144
2025	150	100	222	148

NOTE.—Analysis assumes interest will be applied to the contributions, at a 2-percent "real" annual rate.

The memo highlighted a commensurate reduction in returns on contributions both in the past and in the future, with the following statement:

> Considering single male average-earnings workers, the ratio of the taxes accumulated at interest to the present value of the monthly retirement benefits was about 700 percent for the 1960 case, but this steadily decreased to 275 percent for the 1980 case—i.e., the value of the benefits was seven times the value of the combined employer-

> employee taxes for the 1960 case and 2¾ times for the 1980 case. This ratio is expected to decrease in the future until leveling off at about 110 percent for those retiring in 2010 and later.[54]

However, the memo went on to say that even this favorable return shown for average-earning retiree in the year 2010 was misleading, because it did not take into account the financial "imbalance" now confronting the system. It did not take into account the fact that revenues (taxes) would have to be raised to pay the benefit levels assumed in the computation, or conversely that benefit levels would have to be reduced to stay within the tax schedule assumed in the computation. *In either case, the expected return on contributions for average-earning workers would have to fall even lower.*

The memo suggested that if the tax rates were raised to a level sufficient to cover the projected shortfall, *the ultimate return on contributions would remain favorable for "average-earning" married couples, but would become unfavorable for single men and women.* The memo stated:

> . . . If the program is to be financed on a pay-as-you-go basis completely through payroll taxes, according to that cost estimate the ultimate OASI tax rate (for 2030 and later) would be about 15¼ percent. . . . On this basis, the ultimate "money's-worth" ratios would be about as follows for the average-wage case described previously: 72 percent for single men, 92 percent for single women, and 134 percent for married couples.

In other words, only the married couple case would be expected to recover the value of the contributions made. The single male would recover only 72 percent of his and his employer's contributions; the single female, 92 percent.

It is important to note that these projections pertain to "average-earner" cases. Those who earn more than the average would recover even less of their contributions, and those who earn less would recover more.

Finally, it is also important to recognize that projected returns on contributions are highly sensitive to different assumptions about future interest rates. The projections done for the National Commission assume a "real" interest rate, i.e., adjusted for inflation, of 2 percent per year. This is the longrun rate assumed in the social security "middle ground" financial projections.[55] If future interest rates—adjusted for inflation—are higher, then social security's return would be lower ("outside" investments would give higher returns). On the other hand, if future interest rates are lower, then social security's return would be more favorable ("outside" investments would give lower returns).

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[54] Ibid.

[55] The intermediate II-B assumptions in the 1982 trustees' report.

The basic point, however, is that under this "middle ground" set of projections, future payback times will increase and projected returns on contributions will decline. Using different assumptions would produce different projections, but they would have to deviate fairly significantly to produce a very different outlook.

(C) The Social-Welfare Perspective

The social-welfare "value" of social security is not as easy to quantify as "values" expressed in terms of return on contributions or payback times. Since many people view social security as a big income transfer program with the primary goal of lessening dependency among the aged and others, they see little meaning in judging the program by its returns on contributions or payback times. If one views it as an income transfer program, then by definition high-wage earners and middle-wage earners are not going to get back as large a return on contributions as low-wage earners. The fact that in the future payback times will grow significantly and returns on contributions will fall is less important to them than whether the overall level of dependency among the affected population is kept low.

Those who focus on social security's value from this perspective tend to emphasize its relationship to poverty rates and its overall importance as a source of income to its recipients.

From the poverty perspective, it is frequently claimed that social security is heavily responsible for an overall reduction in the percent of elderly persons in poverty. The following table shows the downward trend in poverty among the various age segments of the population.

Table 16.—TRENDS IN POVERTY, 1959-79

[Percent poor by age group]

	1959	1970	1975	1979
Children under 18	26.9	15.0	16.8	16.0
18-54	16.5	8.7	9.2	8.9
55-64	21.5	11.4	10.2	9.5
65 or older	35.2	24.5	15.3	15.1
All ages	22.4	12.6	12.3	11.6

Source: Social Security Administration, 1981 Social Security Statistical Supplement, table 7.

Based on these statistics, some analysts have pointed out that the incidence of poverty among the elderly is no higher today than in the population at large. However, others argue that this statement oversimplifies the situation. They argue that while the rate of poverty among the elderly has declined dramatically (and certainly faster than for other segments of the population), it is in part because the elderly had a substantially higher prevalence of poverty to start with. Moreover, comparing the rate of poverty among the elderly to that of the population as a whole ignores the fact that it is the youngest and the oldest segments of the population who inflate the aggregate poverty figures. As can be seen from the preceding table, the incidence of poverty among those 65 and older is nearly two-thirds higher than it is for those in the 18 to 54 age span.

Furthermore, they argue that while poverty rates among the aged are very close to those of the population at large, the mean income of the aged is only a little more than half of that of the nonaged (see table 18), and even a modest reduction in the future role of social security could increase those rates substantially.

Proponents of this view also point out that social security is the dominant source of income for a large segment of the elderly population. As the following table shows, 40 percent of persons 65 and older living alone [56] relied on social security for three-fourths of their income; 65 percent relied on it for half or more of their income. Among the poor aged 65 and older, nearly two-thirds relied on social security for more than three-fourths of their income, and more than 80 percent relied on it for half or more.

Table 17.—AGED HOUSEHOLDS RECEIVING SOCIAL SECURITY BENEFITS, BY SHARE OF INCOME FROM BENEFITS, POOR AND NONPOOR, 1979

OASDI share of money income for year	Individuals aged 65 or older living alone or with nonrelatives only				Families with head of household aged 65 or older			
	Total	Nonpoor	Poor	Percent poor	Total	Nonpoor	Poor	Percent poor
Total number (in millions)	7.7	5.4	2.2	....	8.8	8.0	0.8	....
Total percent	100	100	100	29	100	100	100	9
No. OASDI cash benefits	9	7	14	45	7	7	16	19
Some OASDI cash benefits	91	93	86	28	93	93	84	8
Less than one-fourth of income	8	11	....	1	20	22	2	1
One-fourth up to one-half of income	19	25	4	7	26	28	10	3
One-half up to three-fourths of income	24	26	18	22	24	25	17	7
Three-fourths or more of income	40	30	63	46	22	19	55	23

Source: 1981 Social Security Statistical Supplement, table 11.

Proponents of this view further point out that private pensions provide only a modest segment of the overall income received by aged households (13 percent according to 1979 survey data—see following table). Social security, on the other hand, provides almost half of the income received by aged persons living alone (65 or older), and one-third of the income of families with a head of household aged 65 or older. They add that only 35 percent of elderly households (single individuals or with family heads, 65 or older) receive private or similar staff pensions, and only 50 percent of the current private sector work force is employed in jobs covered by private pensions. Less than one-third of them are vested.

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[56] Or living with a nonrelative.

Table 18.—SHARES OF MONEY INCOME FROM EARNINGS AND OTHER SOURCES FOR AGED AND NONAGED HOUSEHOLDS, 1979

Type of money income received during year	Aged households		Nonaged households	
	Individuals living alone or with nonrelatives only	Families with head aged 65 or older	Individuals living alone or with nonrelatives only	Families with head under aged 65
Number of households (in millions)	7.7	8.8	17.9	49.6
PERCENT RECEIVING INCOME FROM SPECIFIED TYPE [1]				
Earnings	15	45	86	95
Public program payments:				
Social security [2]	91	93	7	11
Supplemental security income	12	8	3	2
Other public assistance	2	2	2	6
Other programs [3]	8	10	12	17
Other sources:				
Dividends, interest, rent	67	76	58	70
Private pension, annuities, other [4]	27	45	14	19
PERCENTAGE DISTRIBUTION OF INCOME, BY TYPE				
Total percent	100	100	100	100
Earnings	11	33	88	90
Public program payments:				
Social security	45	33	2	2
Supplemental security income	2	1	1	—
Other public assistance	—	—	—	1
Other programs	2	2	2	1
Other sources:				
Dividends, interest, rent	27	18	4	4
Private pension, annuities, other	13	13	4	3
Mean income	$6,540	$14,730	$11,190	$23,730

[1] Received by individual or any family member at any time during 1979. Most individuals or families received more than one type of income during year.

[2] Social security may include any railroad retirement payments.

[3] Unemployment insurance, workers' compensation, or veterans payments.

[4] Private pensions, Government employee pensions, alimony, annuities, etc.

Source: Derived by the Social Security Administration from special tabulations of the Bureau of the Census from the March 1979 Current Population Survey.

PROPOSALS

The following discussion of proposals to address social security's financial difficulties will basically present two menus. One is a sort of standard "bill of fare" while the other discusses more unconventional ideas.

There have been numerous papers spelling out possible ideas to fix or reform social security. One paper that is particularly worthy of attention was released by the staff of the National Commission on Social Security Reform entitled "Actuarial Cost Estimates for OASDI and HI and for Various Possible Changes in OASDI" (November 1982). It provides a relatively exhaustive list of proposals to address social security's financing problems. While it presents no analysis of the options, it provides a single source of financial estimates for a wide range of options. Another paper worth mention was prepared by the Congressional Budget Office entitled "Financing Social Security: Issues and Options for the Long Run" (November 1982). It is particularly useful because of its extensive analysis of a number of major options. Numerous other congressional committee prints and journal articles present a full platter of ideas. A selected listing of such readings is presented in the Appendix to this paper.

What might be noteworthy about the literature is that it shows that there is an abundance of proposals. The difficulty in reaching a conclusion to the social security issue does not evolve from a lack of creativity. One commentator suggested that the major contribution of having another social security study group (speaking about President Reagan's National Commission on Social Security Reform) was its educational value—and not just for the congressional participants who would eventually help decide the matter—but because of the publicity surrounding the proceedings, for the public as well.[57] The public is probably more aware today that there are many ways of moving on the issue, and that the delay of legislative action has been mostly a consequence of Congress having to confront politically difficult options.

The first half of this section on proposals will review the standard fare, highlighting for those becoming newly acquainted with the issue the major types of changes that are most likely to be undertaken.

The second half of this section will move away from the norm into the arena of more unconventional ideas. Granted, the proposals which this author labels as the "standard fare" contain some highly controversial changes; however, generally speaking they do not overturn or undermine basic principles now underpinning the program. This later discussion will review a number of suggestions for such reform.

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[57] "What Should Be Done To Save Social Security?" Exclusive interview with Wilbur Cohen, the Institute for Socioeconomic Studies, the Socioeconomic Newsletter, vol. VII, No. 2, February-March 1982, p. 4.

(A) The Standard Bill of Fare

The use of the terms "conventional" or "standard bill of fare" is not intended to imply that the following proposals are politically noncontroversial. Many are, for a variety of reasons that will be elaborated on. However, they do not affect the system's "nervous system." They don't upset fundamental underpinnings. In some instances, they call for major changes, but by basically accepting the pay-as-you-go and income redistributional features of the program, they do not raise fundamental questions. This is not to suggest that some of these items don't deviate to some degree from the basic tenets underpinning the system (or that they might not lead to basic alterations), but they are not presented as such in this first section.[58]

The following are the most commonly talked about conventional changes to shore up the system. Each of them will be discussed separately.

(1) Raise the social security tax rate or the earnings base (beyond the increases already scheduled in the law);

(2) Use new income sources (e.g., general revenue) or levy new forms of taxes earmarked for social security (e.g., excise taxes or other taxes on consumption or the like);

(3) Make it mandatory that Government workers and nonprofit employees contribute to social security;

(4) Make social security benefits subject to the income tax;

(5) Delay benefit increases or pay something less than a full inflation adjustment;

(6) Raise the age at which full benefits can be received (from age 65 to age 68 for instance);

(7) Slow the rise of "initial benefits" for future beneficiaries; and

(8) Make selective benefit cuts.

(1) RAISE THE TAX RATE OR TAXABLE EARNINGS BASE

The social security tax rate now stands at 6.7 percent (on the employee and employer each), and with three jumps between now and 1990, it will ultimately stand at 7.65 percent.[59] The taxable earnings base, now at $35,700, will continue to rise in the future in tandem with average earnings in the economy. These tax increases could be accelerated or supplemented. Raising revenues for the system through a tax rate or earnings base increase has been more or less the traditional manner over the years of addressing the system's financial needs. In 1977, for instance, both were raised. As a choice between the broad options of raising taxes or cutting benefits, the tax increase continues to show up consistently as the favorite in public opinion polls.

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[58] An example might be the possible use of general revenues. One could argue that their use would undermine the self-financing principle of the program and eventually lead to means-testing of benefits.

[59] These are the combined rates for the OASDI and HI programs. The OASDI portion of the tax is currently 5.4 percent and is scheduled to rise under present law to a permanent level of 6.2 percent beginning in 1990.

A tax increase is favored over benefit constraints by those who view social security benefits as a quasi-contractual commitment, because it avoids having to take steps that will leave the impression that social security benefits are unstable, and that their existence cannot really be counted on in the future. Others favor it as a near-term measure, because in addition to helping social security it would help reduce Federal budget deficits (thus reducing the amount the Government must borrow from the public, easing pressure on the money markets and interests rates). They would argue that the budget deficits are in large measure the consequence of overly generous tax cuts provided in 1981, and that the lost revenues could be recouped in part by raising the social security tax.[60]

To ameliorate the potential harmful effects of raising labor costs and to lessen complaints from taxpayers arising from tax increases, it has been suggested that the increases might be accompanied by a provision allowing social security taxes to be deducted from one's income in determining taxable income for income tax purposes. In order to create a favorable (or at least neutral) effect on upcoming budget deficits, the "deduction" would be phased in, or limited, so that the lost income taxes would be less than (or at worst not exceed) the added social security revenues.

This "softening" idea also comes up frequently with a proposal to raise the tax on the self-employed to the same level as that required on the employee and employer combined (the self-employment tax rate is now at a level equal to only 70 percent of the combined employee/employer rate, being 9.35 percent instead of 13.4 percent). The self-employed sometimes argue that unlike the employer, they do not get to deduct any portion of their social security tax in determining income taxes. Thus, advocates of an increase in the self-employment tax rate, building on this complaint, suggest that such an increase could be ameliorated by also permitting the self-employed to take an income tax deduction for their social security taxes.

Some have suggested that raising the taxable earnings base (to higher levels than would otherwise arise under the automatic procedure) is the way to increase social security taxes, since only about 6 percent of the covered work force would be affected (in contrast with a tax rate increase which affects all covered workers).[61] It also would avoid adding fuel to the complaint that the social security tax is regressive. While an increase in the earnings base ultimately means that the affected workers would get higher benefits (because their benefits would be based on a higher level of average earnings), the social security actuaries' estimate that there would still be a net gain to the system (their analysis actually shows that ultimately for every $2 raised, $1 in additional benefits would result).

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[60] The 1981 Tax Act (Pub. L. 97-34, the Economic Recovery Tax Act of 1981) was estimated to cause a revenue loss of $1,020 billion over the period fiscal year 1984 to fiscal year 1988. The 1982 Tax Act (Pub. L. 97-248, the Tax Equity and Fiscal Responsibility Act of 1982) only produced a revenue gain of $265 billion over the same period. The advancement of the 1990 social security tax rate is estimated to produce a revenue gain of $100 billion over that period (although it should be recognized that the economic assumptions on which these latter estimates are based are not the same as those used to price the effects of these two recent tax acts). Source: CBO and Joint Committee on Taxation.

Occasionally it is suggested that if a tax increase is needed, it should apply only to the employer, thus avoiding any direct tax increase on the employee and possibly avoiding long-range costs.[62] The argument is that the employer really is not an equal partner today in the financing of the program because he gets a business deduction for his portion of the tax. Further, any increase he may incur is reduced by the deductibility of the tax, and he is likely to pass the residual effect along anyway either in later wage negotiations or through higher prices.

Obviously, an increase in the tax rate or taxable earning base also can be a measure to deal with the system's longrun difficulties. For instance, a tax rate increase could be built into the law today (to come after the 1990 one) that would go into effect when the baby boom crunch comes. Others have suggested that the tax might be permitted to float up or down depending on the needs of the program—a sort of true pay-as-you-go approach. Thus, taxes might go up in the near-term (the next 10 years or so), down in the 1995 to 2025 period, and then up again when the baby boom pressures are felt. It is frequently pointed out that even if the cost of the cash benefits program did rise from 11 percent of payroll today to 17 percent in the year 2030, this would still only mean that an OASDI tax rate of 8.5 percent would have to be in effect—not an unreasonable rate by today's European standards.

A recent twist on the tax increase option is to make such action part of a "triggering" or "fail-safe" device. In addition to whatever direct measures Congress may take to shore up the system (e.g., actually imposing a specific tax increase, benefit constraint, or other measures), a provision might be written into the law calling for a "potential" tax increase in the event the program's financial condition deteriorates at some later point. In other words, a "fail-safe" provision might call for a tax increase (possibly coupled with some form of benefit constraint) to automatically go into effect without further congressional action. In the short run, the triggering event might be the reserves of the trust funds falling to a low level. As a longrun measure, a "triggering device" has been suggested as a strategy for avoiding actually having to write a tax increase or benefit reduction into the law today—a tax increase would exist only as a contingency in the event the adverse financial effects of the retirement of the baby boom generation actually materialized.

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[61] SSA's Office of Research and Statistics estimates that about 94 percent of the covered work force will have annual earnings of less than $35,700 (the earning base for 1983); from tables prepared June 11, 1982, by the Division of Economic Research.

[62] For instance, higher benefits would ultimately arise if the taxable earnings base was increased for the employee.

The biggest problem opponents have with a tax increase is that they feel it would impede the Nation's recovery from the current recession. They argue that since it is an employment tax, it potentially would discourage new hiring, and in the long run would encourage investments in more and better machines over investments in people resources. Analysis done last November by two private economic forecasting groups, Data Resources Inc. (DRI) and Wharton Econometrics, showed that accelerating the 1990 social security tax rate increase into 1984 potentially could cut the growth of the gross national product and increase the level of unemployment. The following table summarizes their projections.

Table 19.—RECENT PROJECTIONS OF THE ECONOMIC IMPACT OF A PAYROLL TAX INCREASE

[In percent]

	GNP growth		Unemployment rate	
	Current law	With 1990 increase moved up to 1984	Current law	With 1990 increase moved up to 1984
Wharton:				
1984	4.9	4.2	8.7	9.0
1985	3.6	3.1	7.9	8.6
DRI:				
1984	4.4	3.8	8.6	8.8
1985	3.9	4.0	7.8	8.0

Under the Wharton forecast 350,000 fewer people would be employed in 1984, and another 450,000 fewer in 1985. DRI was less pessimistic, showing 380,000 fewer jobs in 1984 and an additional 10,000 fewer in 1985. Both forecasts also showed that the tax increase would raise inflation—by 1 percentage point in 1984 under the Wharton forecast and one-half percentage point under the DRI forecast.[63]

Those opposed to tax increases also argue that social security is already the largest single item of withholding for a substantial segment of the Nation's work force.[64] A series of accelerated tax increases might further aggravate the public's dissatisfaction with the overall level of Federal taxation. While a social security tax increase appears as a preferable option when pitted against a benefit reduction in public opinion polls, the tradeoff may not be apparent when the larger deduction appears on the pay slip. Such an increase may be particularly annoying to younger workers who feel the system won't be around in the long run. They may not view it as a solution to the problem at all, expecting that further tax increases or benefit cuts are bound to come up again in the future.

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[63] "Again Washington Faces Hard Choices on Taxes," Business Week, Nov. 22, 1982.

[64] A Social Security bulletin article "Family Social Security Taxes Compared With Federal Income Taxes, 1979," (December 1981) showed that 24 percent of family units who paid social security taxes paid more in social security than in income taxes.

If an earnings base increase were sought, they would argue that the 1977 amendments already disproportionately increased taxes on those affected by the ad hoc earnings base increases built into that law. While the increases in the tax rate between 1977 and 1983 attributable to the 1977 amendments have caused a 6-percent increase for the average-wage earner (whose earnings are below the earnings base), the person whose earnings were equal to or above the base incurred a 45-percent increase. Moreover, these are the people who already were expected to get the lowest returns on their contributions to the system. In this regard, either a tax rate or earnings base increase for this group of people will intensify complaints that social security is no longer a "good deal" for them. As previously described, it is estimated that those in the middle and higher earnings brackets will begin to get negative returns some time after the turn of the century. Any tax increase would only accelerate the advent of this situation.

As for the long run, an increase in the OASDI tax rate from 11 to 17 percent of taxable payroll would amount to almost a 60-percent increase in taxes. Futhermore, it would reflect only a portion of the cost pressures that the system is expected to face. Current projections suggest that if the rapid growth of the HI program continues (even at a somewhat slower pace than today), the composite OASDI and HI tax rate would have to double, rising from 13.4 percent today to possibly 25 percent of payroll or more in 2035.[65]

(2) Create New Income Sources or Tax Levies

As a supplement or alternative to raising social security taxes, it is often suggested that general revenues of the U.S. Treasury or various types of excise, import, sales, or "consumption" taxes might be used to help support the social security system.

General revenues are used only in a small way today in the cash benefits programs, but a major step in that direction was taken in 1965, when the supplementary medical insurance program (part B of medicare) was set up to be half financed out of general revenues (and today more than three-fourths of that program is financed out of general revenues).

Foremost amongst the many ideas for financing social security out of general revenues is the notion that the Government should be an equal partner with the employee and the employer in financing the program. This proposal has been pushed almost since the beginning of the program, in part because it was viewed as a potential way for financing the "unfunded" costs associated with the early generations of recipients who contributed for less than "full" careers and at very low tax rates.

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[65] Such estimates were reflected in a Senate Finance Committee print entitled "Social Security Financing," CP 97-8, September 1981, pp. 32 and 33.

Another general revenue proposal given considerable attention in recent years is to transfer all or a portion of the hospital insurance (HI) tax to the cash benefits program, and finance the HI program in whole or part with general revenues. Some have argued that if the self-financing principle were left intact in the cash benefits programs, the system as a whole (including HI) would continue to be viewed favorably by the public.[66] It further has been argued that the relationship between HI benefits and the tax is already weak because the generosity of the HI "benefit package" has nothing to do with the level of one's contributions—everyone gets the same package of protections (while the link of the cash benefits programs with the payroll tax is weak, the level of one's benefits is determined from one's average wages).

Another related idea would be to have both the DI and HI programs financed with general revenues. They often are viewed as "social" add-ons to social security, not having been part of the original program enacted in the 1930's. Because of this social overlay, advocates of this approach argue that these programs possibly should be financed with a broader tax on society's wealth than the social security tax, such as the income tax.

Still another related proposal of recent years would be to infuse general revenues into the system under adverse economic conditions (e.g., during periods when unemployment is high or the gross national product declines for a number of consecutive quarters). Such a proposal would not require the trust funds to build up any more reserves than are needed to meet relatively normal contingencies, and also would avoid having to raise taxes at the very time that the economy may need stimulus to come out of an economic trough. In effect, it would permit the tax to remain relatively stable over a lengthy period of time and possibly avoid having to take measures that would be unsound for the economy in order to ward off financial problems in the social security system. This proposal is often referred to as countercyclical general revenue financing.

Probably the most visible recent general revenue proposal (some might even view it as an offshoot of the countercyclical measure) would be to simply permit the social security program to borrow from the general fund if the system needs to in order to meet its benefit obligations—a sort of fail-safe, emergency borrowing authority. It would be similar in concept to the "fail-safe" tax increase previously described. It has been argued that such an authority would be needed only for a short period of time during the 1980's; a temporary recourse until the favorable demographics of the 1990's and later decades permit the program to recover naturally from its problems (and allow repayment of the loans made to program in the 1980's). Unlike some of the other general revenue measures, there would be no immediate or defined use of general revenues in the social security system. The necessary tax increases or benefit constraints would be legislated today to meet the projected problem, but if economic conditions should prove to be poorer than currently projected, or if the actuaries' forecast turned out to be optimistic for some other reasons, the program could then call on general revenues to meet the unanticipated shortfall. If on the other hand, the actual experience turned out to be better than expected, the borrowing authority might never be used. Advocates of this approach point out that there is precedent for it in legislation enacted in the 1940's. In order to avoid a scheduled social security tax increase (required to be put in place by the 1939 social security legislation), while maintaining assurance that the system would be able to meet its benefit obligations, Congress enacted a "contingency" general revenue appropriation authority in 1944 to be used if necessary to meet the obligations of the system. While it was never used, the provision was in the law for 6 years (it was repealed in 1950 when major tax increases were enacted to put the system on a completely self-financing basis).[67]

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[66] As an example of this perspective, one need only view the very close association of the supplementary medical insurance (SMI) program with the HI program. Even though three-fourths of the SMI program is financed with general revenues, it is unlikely that the public views it differently from the HI program—i.e., as a program that they have paid for, not as a welfare or income redistribution program transferring resources from those who work to those who do not. Certainly the lack of proposals to means-test SMI benefits illustrates the point.

Some have suggested that general revenues might be used as a means of avoiding escalation of the "poor rates of return" scenarios that would be likely to occur if taxes were increased or benefits were cut to meet the system's long-term imbalance. The argument is that the "return on contributions" problems projected to arise in the future for today's higher paid workers would not be aggravated by current steps to resolve the system's financing shortfall. However, critics of this strategy argue that general revenue infusions would be tantamount to a tax increase, either by ultimately leading to increases in other taxes or to greater inflation which would lessen the future value of the benefits received. Consequently, they argue, it would not take long for analysts to point out what the "lower" returns on contributions from the program actually are with "imputed taxes" representing the general revenue contributions to the system.

From a Federal budgeting viewpoint, the use of general revenues in social security usually is not looked on favorably. While some argue that using general revenues would only worsen the deficit, this is not correct from a strict accounting perspective. The size of the deficiency in the general fund might be increased, but the deficiency in the trust funds would be reduced by a similar magnitude, leaving the aggregate Federal deficit in exactly the same position as before the general revenue transfer. The more fundamental objection, however, is that social security is running a deficit of its own (thereby contributing to the overall Federal budget deficit) and using general revenues in the system does not help with the larger deficit problem. Under current law, one can at least argue that even though the system is running annual deficits (and contributing to the overall budget deficit), it is using reserves that were built up through the earlier collection of payroll taxes. While the liquidation of those reserves is having an adverse effect on the overall Federal deficit (since the Government has to pay off its debt to social security), it can be argued that the root cause of the overall deficit is that the general fund has not been adequately financed. If the system were to dip into general revenues, this would no longer be true. If it actually used general revenues to meet its obligations, it would be a direct cause of an increase in public borrowing. Budget experts also point out that resorting to general revenue would "co-opt" alternative financing remedies that would have a favorable effect on the Federal deficit (i.e., a tax increase or benefit reduction would reduce the deficit).

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[67] The Vandenberg amendment, with specific language requested by Senator Murray of Montana, to the Revenue Act of 1943 provided for appropriation of general revenues equal to "such additional sums as may be required to finance benefits and payments provided under this title."

Use of general revenues has always had significant political appeal because at least initially neither tax increases nor benefit cuts have to be pursued. Liberals have tended to favor it because if a tax increase ultimately arose from the draw on the general fund, it would likely occur through the more progressive income tax (although today there might be some apprehension that the tax revenues might be obtained by similarly regressive sales or consumption type taxes). Furthermore, being an indirect form of taxation, it is sometimes viewed as making it easier to legislate benefit improvements, since a tax increase would not appear immediately to cover the new costs. Liberals have been somewhat hesitant, however, about making very substantial use of general revenues in the system. Their concern is that overuse of them would ultimately lead to means-testing of benefits (why should one program have preference over others in allocating scarce general revenues?). As long as general revenues weren't the dominant source of income for one or more of the programs, the self-financing principle would not be badly damaged. The point is that as long as the worker knew that the major funding for the program came from his contributions, his support would not be eroded, and cutting back the existing benefit package would be very difficult for program critics to push through.

Conservatives have been considerably more mixed on the issue. In the early years of the program, they looked on the use of general revenues as putting the program into more direct competition with other Government functions. This in turn would lead to a means-tested type of program, and its size might have been contained by the public's aversion to such programs (whereas social security expansions were more readily accepted as "paid for" changes) and through the inherent "economies" of means-testing. However, another perspective among conservatives (certainly the more dominant one today) is that moving to general revenues would open Pandora's box in that it would be much more difficult to stop benefit liberalizations. In today's setting, with the system in financial trouble, some would view the use of general revenues as ducking the issue—being simply the transfer of a shortfall from one fund that is in trouble to another (the general fund being viewed as being in even worse shape financially than the social security trust funds).

Besides the various direct uses of general revenues, other new sources of revenue have been proposed. Some call for an earmarking of specific sources of general revenues. One approach would be to earmark a portion of the crude oil windfall profit taxes (enacted in 1979 to be in effect through 1990) for social security. A related proposal would be to repeal various exemptions to the windfall profits tax (enacted in 1981) and earmark just those revenues for social security. Yet another approach would be to impose a surtax on the Federal income tax with those revenues earmarked for social security.

Still other means of obtaining new revenues would be to impose new excise taxes on various consumption items. These include measures to increase the Federal excise taxes on gasoline, or on alcohol and tobacco (with the proceeds funneled into the DI and HI trust funds because of the health problems associated with the consumption of those goods).

The major policy hurdle for such measures is similar to that of using general revenues directly, namely compromising the link between the worker's contributions and the benefits. Some would also see it as eroding the self-financing principle of the program. With regard to taxes related to oil consumption, some critics argue that while such a tax might be consistent with energy conservation policies, it would make social security financing even more unstable since it would be vulnerable, in part, to the volatility of energy consumption.

(3) REQUIRE THAT GOVERNMENT AND NONPROFIT EMPLOYEES PARTICIPATE IN SOCIAL SECURITY

Participation in social security is not required for all jobs in the United States. The more than 2.5 million civilian employees of the Federal Government, for instance, do not participate in social security since they are mandatorily covered by staff retirement systems (the largest being the civil service retirement system). In addition, although not commonly recognized, another 20 percent of the work force is engaged in jobs where coverage is optional.[68] State and local governments and nonprofit institutions have a choice as to whether or not to participate.[69] About 18.5 million people are employed by these entities, of whom 5 million or more are not covered. All told, about 8 million Federal, State, local, and nonprofit jobs are presently not covered.[70]

Various proposals have been gaining momentum in the past couple of years to cover these excluded workers on a mandatory basis. Proposals have ranged from covering everyone currently employed in these institutions immediately (including those who have worked for many years under alternative staff pension systems) to only new hires. They also range from covering only Federal workers to covering workers at all levels of government and those in nonprofit institutions. The major catalyst for these measures is that they would bring substantial new resources into the social security system in the near term (while the near-term benefit payout would be very small in comparison).

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[68] Generally, at the option of the employers, not the employees.

[69] Largely because of their political "clout" and the constitutional question of whether mandatory coverage is tantamount to Federal taxation upon the States, and because of the traditional exemption of nonprofits from most major forms of Federal taxation.

[70] There are other types of employment exempted from coverage. These include railroad employees (whose system is already structured, for the most part, around social security), very low-paid domestic employment, other low-paid casual labor, certain farm employment, and low-earning self-employed persons.

Government employee unions frequently argue that the financial benefit to the social security system of mandatorily covering Government workers would produce only a short-term windfall for the system. They argue that Government workers would earn benefit rights and thereby eventually contribute to the system's longrun imbalance like everyone else. In effect, they argue that assuming extension of coverage would be beneficial is shortsighted. Actuarial estimates, however, suggest that the favorable effects would not be short lived—that there would be a favorable longrun effect, possibly reducing the average longrun deficit by more than one-fourth. Because Government workers often get social security coverage from late-life work (after they have left their Government jobs) or from moonlighting, they often end up receiving social security benefits anyway, and frequently their benefits represent a huge return on their contributions because their work in covered employment has not been very substantial (they appear to be low-wage earners because their Government work history is not taken into account). They, in effect, reap the advantage built into the system's benefit formula for low-wage earners. Extending coverage to their Government work would eliminate this windfall. Furthermore, even though Government workers don't earn the very high salaries often available in the private sector, on average their earnings tend to be higher than the average earnings of workers covered by the social security system. This means that if they were covered, they would benefit somewhat less from the tilted benefit formula than the average covered worker, and the system would incur a smaller payout per dollar of contributions. The actuaries' analysis suggests that these two effects of extending coverage would lead to an ultimate net gain to the system. While coverage by itself would not eliminate social security's financial shortfall, their estimates show that it would produce a sizable reduction.[71]

While the financial problems confronting social security have been a catalyst in recent years for the proposals to cover Government and nonprofit workers, the concept has been pursued by program advocates almost since the inception of the program. Their ultimate goal is to cover all workers. Since the program has strong social or welfare-type features, they contend that everyone in society should help meet its tab. Giving impetus to this philosophical argument is that the public until recently was not well aware of the fact that Government workers had alternative systems. Now that the social security system is facing financial difficulty (and receiving considerable publicity of such), the public has been made aware that Government employees do not have to pay the social security tax (and be part of the program), and they complain that it is unfair that Government workers don't have to share in the problem. Proponents of expanding coverage also point out that in addition to eliminating "windfall benefits," problems involving potential gaps in protection would be closed. Civil service pension credits, for instance, are not transferable (or portable) if a worker leaves a Government job for one in the private sector. He may or may not have any vested survivor benefit rights for his family and he is not likely to carry any disability protection with him.[72] It is also argued that social security generally affords better survivor and disability protection to younger workers than Government staff plans.

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[71] From another viewpoint, however, the longrun advantage might be significantly reduced (or even disappear) if Government salaries were to eventually lag behind the average salaries of all other covered workers.

Government employees tend to be skeptical of social security coverage. They generally perceive it not to be in their self-interest—that it is a backdoor way of cutting benefits such as by creating a later retirement age or imposing a limitation on benefits to take account of outside earnings.[73] They have paid into their staff retirement systems for years, and made career decisions (partly) in consideration of an understood retirement system that they now see as threatened. They tend to place great emphasis on their pension programs as being part of their total compensation for Government service. While they do not have the potential to achieve the very high salaries that exist in the private sector and have sustained losses in relative earnings power due to pay caps, they see having a relatively substantial pension benefit as part of their compensation for these limitations. Government employees also have been coming under heavy assault in recent years because of accusations and political characterizations of "being overcompensated and under-worked." One area coming under heavy scrutiny is fringe benefits, thus Government employees are skeptical about any changes advanced today to put them under alternative pension arrangements.

They also frequently point out that their nonparticipation in the social security system is not the cause of the system's financial woes. They argue that the real problem is the manner in which it is financed. Covering them would only postpone the ultimate day of reckoning. As for the so-called "windfall" benefits problem, they argue that it (and the potential benefit "gaps") can be dealt with through lesser measures than completely covering them under the system (e.g., adopting benefit offsets or transferring credits from one system to the other).

Although liberals have tended to favor coverage of the entire work force philosophically, because organized labor has often come out in opposition, they have tended to have mixed feelings. Furthermore, Government employment generally is not an area where retirement and income protection is lacking—most Government employees have had alternative pension systems for many years.

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[72] And it will take him possibly 5 years to obtain benefit rights for social security disability benefits from his new private sector job.

[73] Although these effects would not necessarily evolve from their coverage under social security.

Conservatives have tended to be mixed on the issue as well (as they have been on general revenues) because they are torn between two concerns. The first (and probably more dominant of late) has been the fairness question. Why should these workers avoid paying a share of the social costs built into the social security system? The second is the more deep-rooted issue of whether social security should be universal. The fact that a significant segment of the work force is not covered, or has an option, is sometimes seen as a symbolic wedge toward greater optional coverage.

(4) SUBJECT SOCIAL SECURITY BENEFITS TO THE INCOME TAX

Because of IRS rulings which date back to the late 1930's, social security benefits are tax free (nothing in the law states they will be). The general feeling in the then Bureau of Internal Revenue was that the Court had viewed social security as a program for the "general welfare" of the Nation and therefore it didn't take on the character of other forms of income. In recent years a number of social security study groups as well as many economists have suggested that social security benefits should be subject to the income tax. They argue that the basis for the initial exemption was wrong—that it should be treated like any other form of retirement income, such as a private pension. Other forms of retirement income typically become taxable once the worker gets back the value of his contributions plus interest (since he already paid income taxes on those contributions earlier in his life when they were part of his gross income while he worked). Others have suggested that social security taxes might be made deductible from gross income in the year they are paid into the system, with all benefits becoming taxable when they are later received (as is the case for various forms of deferred compensation). Another option would be to tax half of the benefits, on the theory that since the employer's share of the tax was deducted from the employer's earlier income, the benefits accruing from his contributions (theoretically one-half of those received) should be taxed. Yet another proposal would exempt persons from taxation if their incomes fell below certain levels. This approach might follow that of the unemployment insurance program where benefits become taxable only when they push an individual's income above $12,000 per year ($18,000 for a couple).

Recently, the idea of taxing benefits has been coupled with raising the social security tax. The aggregate effect of raising social security taxes could be mitigated by income tax deductions for part or all of such taxes, but as with other forms of deferred compensation, the benefits would become taxable when received later. This would avoid instituting any abrupt increase in taxes for both workers and people currently on the benefit rolls or nearing retirement.

The amounts of money involved with the taxation of benefits are not small. For instance, in 1984 the lost tax revenues resulting from the fact that benefits are tax free are estimated to be on the order of $20 billion. Even modest proposals to tax half the benefits for persons above the unemployment insurance thresholds would still bring in $30 billion in new revenues during the period fiscal year 1984 to fiscal year 1988.[74] While the amounts of funds involved would not by themselves be enough to ward off the system's financial shortfall (assuming the new revenues were funneled back into the social security system), they would put a noticeable dent in the problem.

The idea of taxing benefits, however, has been very unpopular in the Congress. In the 96th and 97th Congresses, three resolutions were passed expressing the opposition of either the House or Senate to the idea. Many people view it as simply a benefit cut. For some it could amount to a 50-percent cut (depending on the proposal and assuming they were in a 50-percent marginal income tax bracket). They argue that the rules are being changed midstream, since they are already receiving their social security benefits and have established a certain standard of living with them. They allude to the quasi-contractual nature of the benefits, and argue that when they contributed, the existing benefit package did not include this constraint.

Supporters point out that social security is basically a massive money machine—whose primary function is income transfer, and that benefits should be targeted away from those who really have other substantial incomes. While means-testing benefits might erode public support if directly imposed, taxation of benefits would better target the benefits without actually imposing the notion of welfare on the system.

(5) DELAY BENEFIT INCREASES OR MAKE THEM SOMETHING LESS THAN A FULL INFLATION ADJUSTMENT

While there have been numerous ways suggested to limit the growth of social security expenditures, probably the most seriously looked at options (at least with regard to the short run) are those which would somehow constrain the cost of the annual automatic benefit increase. Social security benefits go up automatically with changes in the Consumer Price Index (CPI) usually each July.[75] It is the largest single, identifiable factor driving up social security costs.[76] Because the amounts of money are so large, altering the increase provision is viewed as an ideal form of benefit constraint since large sums can be saved without imposing a severe financial burden on any particular subgroup of the beneficiary population. For instance, in contrast to proposals which tighten the conditions of eligibility, it doesn't preclude anyone from receiving benefits; it lessens the amount of an increase. In essence, it has the inherent advantage of being able to disperse the pain among 36 million existing recipients, and to a limited extent, new beneficiaries joining the rolls.

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[74] Source: Congressional Budget Office, February 1983.

[75] Based on the increase in the Consumer Price Index from the first calendar quarter of the previous year to the first calendar quarter of the year of the increase, and assuming the rise was 3 percent or more. No benefit increase would be paid if the rise were less than 3 percent.

[76] The 1980 benefit increase had an estimated cost of more than $16 billion in the 12-month period following the increase; comparable estimates for the 1981 and 1982 increases were $15 and $11 billion respectively.

Critics of the current benefit increase procedure argue that when the social security benefit increase is coupled with automatic increase provisions of other Government programs, it adds to and helps perpetuate an inflationary spiral in the economy. They further argue that because the increase is tied to inflation, beneficiaries have fared better than the workers whose tax payments provided the resources for the system—since the late seventies, workers' earnings on average have not kept up with inflation.

Others argue that the CPI distorted the "true" rate of inflation in the recent past, because it overemphasized the costs of purchasing a home (only a very small segment of family units buy new homes each year—even fewer elderly persons do—yet the CPI assumes 40 percent or more of the typical consumer's market basket is associated with housing costs). They argue that from the mid-1970's to 1981, this aspect of the CPI "overstated" inflation by 10 percent or more, and thus social security benefits rose substantially faster than the "true" rise in the cost-of-living.[77]

Still others argue that the automatic nature of the benefit increase has precluded Congress from practicing the fiscal oversight that it conducted regularly when benefit increases were given on an ad hoc basis. In the past, whenever a benefit increase was provided, it was accompanied by a reevaluation of the financial condition of the system (and if the system couldn't afford the increase, additional taxes were levied or "expectations" were lowered). It is argued that this fiscal propriety is not practiced today because benefit increases are automatic.[78]

Various ways have been suggested to reduce the costs of the benefit increase. They basically fall within three groups. One would change the measure of adjustment or the amount of the adjustment directly. Another would change the timing of each benefit increase (i.e., when the benefit increase occurs). And the third would alter the period of time over which "inflation" is measured.

In the first category, people are either suggesting that the benefit increase should be computed differently, or that it should not be as large as the rise in the CPI. Critics of the way the CPI has treated housing costs having suggested that other inflation indices that measure the change of rental prices, in lieu of home purchase prices, give a more accurate picture of inflation. Indices such as the Department of Commerce's implicit price deflators for personal consumption expenditures and for the gross national product have this feature. They also point out that these indices take into account changes in consumption habits fairly frequently, whereas the CPI has not changed its "market basket" since 1972/1973, when the last survey of consumer consumption habits was made.[79] Still others suggest that moving to another measure of inflation is too "iffy." If mortgage interest rates continue to drop, for instance, some of these other measures of inflation might produce higher benefit increases in the near future than the CPI.[80] They contend that the only real way to guarantee savings from changing the benefit increase is to actually peg it at less than it would otherwise be. Saying that it could not exceed 4 or 5 percent each year (a limit often practiced by the few private pension plans that actually provide increases) might be one approach, pegging it to 75 or some other percent of the rise in the CPI is another. Capping it at a maximum dollar amount (say the amount that would be paid to someone with an average benefit) is a similar approach, which would give a full inflation adjustment to those with the lowest benefits (on the presumption that they needed it the most), while producing a progressively lower increase (percentage-wise) for those with larger benefits.

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[77] While social security increases may have been too large in recent years, this may not be the case for the near-term future if mortgage interest rates continue to decline.

[78] While critics of past "ad hoc" benefit increases argue that some of them were excessive (particularly in that they were often far in excess of increases in inflation), each benefit increase was enacted after an actuarial analysis showed how it could be financed.

[79] BLS historically has updated the market basket for the CPI about once every 10 years.

Another way of cutting the cost of the increases is to delay it in some way. It is now paid in July. It frequently is proposed that the month of the increase be moved to October to conform with the beginning of the Federal fiscal year. Some have suggested that such a change might be accomplished over a 3-year period, with the increase month moved back by 1 month a year (being paid in August in the first year, September in the second, and October in the third). This would have the advantage of not actually having to set an increase in the law below the rate of inflation, while achieving savings from the "delay factor." Still another related, although more extreme, measure would be to provide a benefit increase every 2 years, with the increase based on a 2-year, rather than 1-year, measuring period.[81]

Yet, a third way of reducing the cost of the increase is to change the period over which inflation is measured, or to change the "triggering" device. This might involve, for example, shortening the measuring period for a number of years so that rather than paying benefit increases based on 12 months worth of inflation, they might be based on a 9-month change. This might be done for a number of years, and later when the system's financial health improved, subsequent increases might be based on a 15-month change (possibly restoring the original levels of benefits that would have arisen without the change, while creating savings in the intervening years). Alternatively, the so-called "triggering device," which currently calls for an increase to occur only when inflation is equal to or greater than 3 percent, could be raised. Since 1975, this triggering level of inflation has been reached every year, but if originally it had been set at say 6 percent or 8 percent, there would have been a number of years in which the benefit increase would not have been paid (1983 would have been one of them).

Another whole set of proposals would be geared toward making the "system" less sensitive to changing economic conditions—they frequently are called "stabilizers," and as such would not necessarily produce benefit constraints. Pegging benefit increases to the lower of the increase that occurs in wage levels or prices is one such proposal. If wages were once again to resume growing faster than prices, this proposal would produce benefit increases no different from those under current law. However, if prices were to continue to outstrip wage gains, benefit increases would be lower than those under current law, and the spread between income and outgo to and from the system would be lessened. This approach also is suggested as a means of bringing greater equity between beneficiaries and workers when workers' earnings aren't keeping up with inflation.

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[80] The recent trend shown by the CPI-X1 (the experimental rental equivalency measure) shows that if it were used today, it could cause a larger benefit increase in July 1983 than the regular CPI.

[81] This type of proposal would have to be constructed carefully, in order to avoid creating a permanent "notch" type of problem (some people just a few months apart in age could wind up with substantially different benefit levels depending upon how the change was implemented).

Another stabilizer idea gaining attention recently would be to peg the benefit increase to the change in wage levels minus a certain percentage. When the benefit increase provision was initially conceived in the early 1970's, the actuaries made it known that the provision would be financially sound only if wages continued to rise faster than prices in the future (since the system's income relies on a tax imposed on wages). They said if this spread were to be substantially smaller than they were projecting, or if price increases exceeded wage growth, the system could run into financial difficulty, as it has. Advocates of this new stabilizing device suggest that this balance between income and outgo of the system can be substantially achieved by actually building this spread (the necessary difference between wages and prices) into the benefit increase provision. If a 1.5- to 2-percent spread is what is assumed necessary to keep internal balance between income and outgo, then benefit increases can be geared to this by pegging them to the rise in wages minus the specified percentage. This approach has an advantage (for some) over using the "lower of wages or prices" device because it can work in two directions. The "lower of wages or prices" proposal potentially only triggers a cut in the benefit increase—it cannot trigger a larger than normal increase. This "wages minus a certain percentage" approach potentially could produce larger benefit increases, if average wages in the economy increased by more than that "certain percentage." In other words, it can work in ways that are both favorable and unfavorable to the beneficiary.

Yet, another type of change proposed with regard to the benefit increase is to make it part of a "fail-safe" mechanism. A provision might be written into the law automatically calling for a smaller than normal benefit increase, if the financial condition of the system were to deteriorate beyond expectations. As with the "fail-safe" approaches described earlier, i.e., triggering a tax increase or general revenue loan, this approach might trigger a lower benefit increase when reserves of the trust funds fell to a low level. Some would point out that simply moving back to the old "ad hoc" approach to providing benefit increases would achieve approximately the same thing, in that it would "force" an assessment of how much of a benefit increase the system could handle at each point that pressure for an increase mounted.

Critics of cutting back on the automatic benefit increase argue that this is one of the best provisions of the social security program. It is a feature that no private pension system can match, and its existence over the past 7 years has brought considerable assurance to persons planning or entering retirement about their ability to meet their retirement income needs. Critics also argue that with inflation as rampant as it has been in the past decade, the automatic increase has probably been the single most important feature of the program in terms of keeping many elderly persons out of poverty. One recent study done by the American Association of Retired Persons estimated that if the cost-of-living adjustments for the period 1982 to 1984 had been reduced by 3 percentage points per year, the number of elderly persons in poverty would have risen by 30 percent—from 4.1 million people in 1980 to 5.3 million in 1985.[82] Critics further point out that while benefit increases recently have exceeded the rise in wages that workers received, social security benefits are for many retired persons the only form of retirement income that has kept up with inflation. So while a worker's earnings might rise at a slower pace than inflation, a substantial portion of a beneficiary's income might not rise at all—it is fixed.

Critics also contend that the situation, where prices (and thus benefit increases) are outstripping wage increases, is a relatively unusual phenomenon, and that when the movement of wages and prices are looked at over long periods historically, wages have tended to grow considerably faster than prices. Thus, while social security beneficiaries have been doing better (to some extent) than workers during recent adverse economic periods, they won't do as well as workers when economic times are better—they won't get to share in the productivity gains achieved by workers. In this regard critics also point out that very old beneficiaries fall substantially behind the prevailing standard-of-living (when there are sustained periods of economic growth) because their benefits are tied to a standard-of-living that existed many years earlier.

Other critics point out that switching to an alternative index might lead ultimately to higher costs. A change to a wage-related index, where the benefit increases are set at a certain percentage or amount of wage growth might ultimately lead to a "full" wage adjustment of benefits, which would produce a very substantial increase in costs for the program in the long run. Even the proposal that starts out basing benefit increases on the lower of wage or price increases, might ultimately be modified to reflect "full" wage adjustments. Similarly, benefit increases tied to an inflation measure other than the CPI might change course and turn out to rise faster than the CPI in the future and eventually lead to higher benefit increases and program costs.

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[82] Data Resources Inc., and Thomas C. Borzilleri, "The Impact to Proposals To Modify Social Security Cost-of-Living Provisions on Aged Poverty, 1985 and 1990," prepared for the American Association of Retired Persons, March 1982.

(6) RAISE THE AGE AT WHICH ELIGIBILITY BEGINS OR FULL BENEFITS CAN BE RECEIVED

The age at which a retiree can receive what are labeled "full" social security benefits is 65.[83] Although established on a relatively arbitrary basis (there was nothing scientific about age 65 being the social security retirement age), this benchmark retirement age has survived since the inception of the program. Since 1956 for women and 1961 for men, benefits have been available as early as age 62, although they are actuarially reduced to take account of the longer period of time that they will be received. Most people, in fact, do file for benefits early.[84] Many proposals to raise the age at which full benefits can be received or similarly to raise the first age of eligibility for retirement benefits—age 62—have been suggested in connection with resolving social security's long-range financing problems. Most such proposals are not envisioned to go into effect until the turn of the century, and possibly somewhat later. Furthermore, no proposal to immediately alter the initial eligibility or full-benefit ages to meet the near-term problem of the system has received any serious congressional attention. To the extent that a proposal to raise the age thresholds were implemented soon (i.e., in the near term), it would likely be phased in very slowly (possibly over as long as a 36-year period) and thus would not have much of an affect on those retiring in the near-term future. Even those proposals that would not begin until the turn of the century call for whatever age change is envisioned to go into effect gradually over a 10-, or possibly, 20-year period.

If the age at which first eligibility occurs were raised in tandem with raising the full benefit age from 65 to 68, benefits no longer would be available before age 65 and the amount payable at age 65 would be 18 to 20 percent less than would otherwise be payable to those who chose to retire at that age. Other proposals call for retaining 62 as the minimum age for eligibility, but raising the age for full benefits to 68. Thus, retirees would still have access to benefits at age 62 (possibly at an actuarially reduced level), yet full benefits would not be received unless retirement were put off until age 68. If benefits were actuarially reduced from 68 down to 62, instead of getting 80 percent of full benefits at age 62, a beneficiary would get about 64 percent of full benefits.

Another approach would be to allow the age thresholds to float up to take changes in longevity into account as they occur in the future. This would provide a "flexible approach" to setting the normative retirement age, so that Congress periodically would not have to face the question in the future. Still another type of change would be to reduce the amount a worker might get by retiring early, while keeping the age at which full benefits can be received at 65. Since benefits are actuarially reduced for those filing before age 65, if everyone were to wait until age 65 to receive benefits under this proposal, there would be no lasting savings from it (only a shortrun windfall that would eventually wash out). If a worker has a choice, i.e., his retirement was not forced upon him by ill-health or unemployment, then it would always be advantageous for him to wait until age 65 to receive his benefits. Thus, an incentive would be created for workers to delay their receipt of benefits if possible.

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[83] Actually, beneficiaries who retire at later ages than 65 receive even higher benefits because of a 3-percent-per-year "delayed retirement credit" (available up to age 72) and potentially higher "average earnings" caused by their additional work.

[84] In 1980, 70 percent of the new "retired worker" benefit awards were reduced because the worker filed for benefits before age 65.

Frequently proposals to alter the retirement age, or the reduction factors, are coupled with suggestions that other programs be liberalized to reduce the potential ill effects of the proposals. For instance, frequently it is proposed to lower the age at which SSI aged benefits can be paid to 62 (from age 65 today) to compensate for raising the minimum eligibility age for social security from 62 to 65. Others suggest that the DI and unemployment benefits might be liberalized for persons in the affected age groups (usually affecting those between 62 and the new eligibility or full-benefit ages) so that those who involuntarily leave the work force receive the approximate benefits provided under current law.

Advocates of raising the age thresholds for social security benefits frequently want to offer the public a "fundamental" change to shore up the system. In contrast to other potential changes, raising the retirement age is "visible"—it is not wrapped up in technical features of the program. It carries the image of doing something "very substantial" to fix the system. Others rationalize the proposal as simply conforming social security to changes in longevity that have occurred and are projected to continue on into the future. The argument goes that if people will live longer in the future, then the percentage or proportion of their lives that they will be on the social security retirement rolls should be relatively constant for each successive generation in the future. If the retirement age were to remain at age 65, then future retirees would receive retirement benefits for substantially longer periods of time than current beneficiaries, simply because they will live longer.

Since most such proposals for raising the age would not go into effect for many years, no one currently receiving benefits or approaching retirement would be affected. Furthermore, benefits would continue to rise nominally in the future, and thus, on the surface, no one would appear to be reduced below existing levels at the point of each incremental change to the system. As for the financing question, advocates point out that most such proposals can, by themselves (and depending upon how rapidly they are phased in) eliminate two-thirds or more of the system's long-range financing shortfall.

Critics of altering the retirement age contend that it is nothing more than a benefit cut. If the age at which full benefits can be received is raised to 68 and early retirement benefits to 65, this is nothing more than a 20-percent cut in benefits for those retiring at age 65, and worse, simply cutting off benefits completely for those who would otherwise retire before age 65.[85] They frequently point out that many persons retiring at early ages do so involuntarily. Such persons may not be able to continue in their work, but at the same time they may not be so severely disabled that they cannot perform some other "minimal" work in the economy. Thus, they would not be eligible for social security disability benefits, if early retirement benefits were not available until age 65. If they were unemployed, the unemployment benefits they might qualify for may be limited in duration and very likely in size (relative to what they would have received from social security had it not been altered). Critics further argue that the long-range problem to which most such proposals are addressed is too speculative to make changes in the retirement age today, and that plenty of times exists between now and say the turn of the century when the first steps of such change would have to be taken. As the nature of employment opportunities change in the future (i.e., the shift from blue collar to white collar jobs), people generally may be inclined to want to work longer anyway, particularly if this shift in the composition of jobs in the labor force is coupled with a projected shortage of labor expected to arise when the baby-bust generation enters the work force. There possibly will be many more incentives for workers to remain in their jobs because of a potential shortage of labor.

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[85] Even those inclined to cut future social security benefits often view raising the retirement age as "too visible" politically.

They argue that social security benefits are still not all that bountiful despite the enormous cost of the system, with almost 30 percent of the elderly relying on them for almost all of their income. Furthermore, while the role of private pensions in providing future retirement income is highly conjectural (i.e., that it may grow), many critics of raising the retirement age (or, for that matter, making any significant reduction in future social security benefits) argue that the proposal does not take into account the fact that less than half of the work force is currently working in employment covered by private pensions, and that this percentage has not changed much in the past two decades. They further point out that while the percent of elderly persons in poverty is no higher than for the population at large, a major contraction of social security benefits could throw a substantial number of near-poor elderly below the poverty line. Critics also raise the point that raising the retirement age would hit minorities and persons in poorer health the hardest, since they do not tend to live as long as others. Furthermore, if the disability and unemployment programs were liberalized to deal with these so-called "gap people," it would become much more difficult in practice to make distinctions between persons who are disabled and unable to work from others who are only slightly less incapacitated. Stories of abuses of the programs would likely become prevalent, and the credibility of the programs would be brought into question. Still others would be concerned about the image of the long-term stability of the benefit package if the retirement age were adjusted today (the impression this might leave is that raising the retirement age was only the first step). And finally, since the aggregate benefits a person would receive over his lifetime would be lower than under current law, there would be an increase in the number of persons allegedly getting "relatively poor" returns on their contributions.

(7) CONSTRAIN THE GROWTH OF FUTURE BENEFIT LEVELS

While most people realize that social security benefits are increased periodically for people currently receiving benefits, it is less commonly understood that the basic benefit formula—the formula used to compute "initial" benefit levels—is also indexed to raise the initial benefits of future entrants to the program.

Social security benefits are derived from a worker's average earnings (from much if not all of his career), thus, benefits given to future recipients would rise naturally as wage levels in the economy went up over time. However, in addition, initial benefit levels also will rise in the future because of two "indexing" features affecting the current computation procedure: (1) indexing of the brackets in the benefit formula, and (2) indexing of wage records.

Because the social benefit formula is tilted to favor workers with low average earnings, if the three brackets of the formula ($1 to $254 in average monthly earnings, $255 to $1,528, and $1,529 and above) were not indexed, more and more of the average earnings of future entrants to the program would fall into the higher brackets, which produce lower replacement rates. In effect, even though benefit levels would rise in the future for new recipients, the amount that those benefits would represent of a worker's preretirement (disability or death) earnings would fall steadily for each successive group of new entrants to the system, if the brackets in the benefit formula were not indexed to keep up with rising wage levels. Another feature of the initial benefit computation indexes a worker's year-to-year earnings so that his average wages are determined on the basis of relative wage levels prevailing at a time close to the worker's entry onto the rolls. These two indexing features help keep social security benefits a constant percentage of preretirement earnings for each successive group of future retirees. As a result, each generation of workers in the future will have the same percentage of their preretirement earnings replaced by social security, no matter when they reach eligibility age in the future. Another way of looking at it is that social security's role in providing retirement income in the future will not change up or down.

A number of proposals have emerged in recent years to alter the benefit formula in some "gradual" way so as not to allow new benefit awards to rise at the same rate that wages rise in the economy. Under them, replacement rates would fall for a while as the benefit formula grew at a slower pace, and at a somewhat later time, they would level out again (although at a lower level than would otherwise prevail). The longer the benefit formula was constrained, and the earlier the constraint began, the larger would be the financial impact on the system.

Given that the currently projected longrun imbalance between income and outgo to the system is equal to about 13 percent of the aggregate cost of the system on average over the entire 75-year period, a cut in future benefit levels (not below existing levels, but below the levels that would otherwise prevail) of about 15 to 16 percent across-the-board for future new entrants to the system would eliminate the average long-term deficiency of the system.

Under current law, a future worker with steady average earnings retiring at age 65 could expect to receive benefits equal to about 42 percent of his final year's earnings. If the long-term imbalance of the program were eliminated solely through this type of a benefit constraint, his replacement rate would be brought down to about 35 or 36 percent[86] (assuming all future recipients were affected equally).[87]

Three types of changes have been suggested to constrain the growth of the benefit formula. Probably the most visible of late is the proposal to limit the growth of the so-called "bend points." The "bend points" of the benefit formula are the two dollar amounts at which lower replacement rates set in—$255 and $1,529 in the 1983 formula. For average earnings above $254, for example, the benefit rate drops from 90 percent to 32 percent (up to earnings of $1,528). These "bend points" are indexed each year to keep pace with average wage growth in the economy.[88] Obviously, if they were not permitted to go up, or if they rose more slowly than wages, initial benefit levels would rise more slowly than they otherwise would, and savings to the system would accrue.

A number of approaches have been suggested to limit the growth of the bend points. One would limit their growth to the lower of the increases in wages or prices. A second would tie them to the growth in prices, period. Still another would freeze them altogether for a specified period (say 2 or 3 years). All of them impose a relatively gradual constraint on the program, which over some period of time (varying with the specified constraint chosen) could produce very large longrun savings for the system. If the bend points were allowed to rise at only one-half the rate that wages grew for 14 years (give or take a year), the average long-term imbalance of the system would be eliminated. The bend points in effect after this 14-year period would be permanently lower than they would otherwise be, and, thus, even if full wage indexing were to resume, the benefit levels for all future workers would be permanently lower.[89] In effect, replacement rates would fall during the phase-in period for those becoming newly eligible during the period, and then level out at a new constant but lower level for all future workers becoming newly eligible after the transition.

Another related indexing constraint would be to adjust a worker's earnings history by less than the full wage index. Rather than actually tampering with the benefit formula itself (e.g., through the bend points), this approach would constrain the amount or size of a worker's "average earnings" used in the benefit computation. Since each newly entitled worker has his earnings indexed, and this index changes every year, artificially limiting the growth of the index (as with the bend point limitation) would reduce the amount of average earnings considered in the computation, and thus, the size of benefits and future replacement rates. Unlike the bend points constraint, however, this limitation would have to go on indefinitely into the future (because of inherent mathematical aspects of the procedure) to produce permanently lower benefit levels. In other words, this change—that earnings histories would not be fully raised to near retirement (death or disability) levels—would have to be made a permanent limitation in order to have the same aggregate financial effect as a limitation of the growth of the formula's bend points.

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[86] From 35 percent to 30 percent for an age 62 retiree.

[87] It should also be noted that this would only eliminate the deficit *on average* for the 75-year period; as one neared the latter portion of the period, outgo would begin to exceed income. Later trustees' report would begin to show long problems again.

[88] It should be noted that if average wages were to decline in the future (although not a commonly held expectation) the bend points actually would fall in tandem.

[89] Although benefit levels would continue to grow in nominal terms.

A third type of formula constraint would be to reduce the benefit percentages in the formula. The percentages in each of the three brackets of the formula—90 percent in the first bracket, 32 percent in the second, and 15 percent in the third—would be lowered. If the system's long-term problem were to be eliminated completely through a proportional reduction in each of these percentages, they would have to drop to 76, 27, and 13 percent, respectively. This would produce, on average, about a 15- to 16-percent reduction in benefit levels for future entrants to the program. If this cut in the percentages were phased-in over a little more than a decade, it would produce the same aggregate effect on the program's financing as constraining the bend points for roughly a similar period.

The main point to be made about benefit formula constraints is that they can be devised to produce almost any amount or type of constraint one desires. They also can be altered to raise the size of the program. The difference between these three types of changes is mostly in their distributional effects—whom they hit and by how much. The bend points limitation would have its largest effect on those whose "average earnings" are close to the two current law bend points. Workers whose average earnings are somewhat below the first bend point are not affected at all. Those whose average earnings are midway between the two points (or well above the third one) are hit proportionately less. The proposal to limit the amount of indexing to be applied to a worker's average earnings hits those with the lowest benefit levels the hardest (since those in the lower benefit brackets get the greatest replacement for each dollar of average earnings they have). The proposal to alter the percentages in the formula itself (90/32/15) has the smoothest across-the-board effect, since the benefits of everyone becoming entitled in the future would be reduced by the same percentage. Its principal disadvantage is that it is a more visible benefit cut than the other two (unlike the other two, it is not caught up in technical aspects of indexing various program features).

For some advocates, the principal advantage of any type of benefit formula constraint is that it is not obvious. They do produce cuts that can be translated into "average reduction" figures. Thus, it's hard to disguise the fact that they are cuts, but they are not ladened with the same emotionally charged "overtones" brought out by such measures as raising the retirement age. They also frequently have the advantage over other types of cuts of being able to spread the burden—they do not target the impact on a specific group of beneficiaries or workers. For instance, raising the retirement age affects only the retired segment of the beneficiary population (while constraining the growth of the bend points affects all future beneficiaries).[90] They also have the advantage of not making drastic changes for any one group, such as tightening the "recent work requirement" for disability benefits (which cuts off eligibility altogether for some persons).

Advocates also point out that a modest reduction in future replacement rates, would not be moving away from the concept that the program provides a "minimum floor of protection" for most workers. In this regard they point out that replacement rates have risen substantially over the years. A worker with average steady earnings retiring at age 65 in 1952 had a replacement rate of about 26 percent. A similarly situated worker in 1973 has a replacement rate of about 39 percent. The future retiree (similarly situated) will receive a benefit which replaces about 42 percent of his prior earnings. Thus, even a 4- to 6-percentage point reduction of the future replacement rate for the average steady earner (a 10- to 15-percent reduction in future benefit levels) would not provide him with a significantly more austere social security benefit than that provided to retirees in the early 1970's (at least when viewed from an earnings replacement perspective) and certainly higher than that provided to retirees in the 1950's and 1960's. Some critics further argue that Congress did not make an explicit choice to have replacement rates rise from the levels which existed in 1972—that the rise was more an aberration of how unexpected economic conditions influenced the size of initial benefits. If the 1972 levels had been sustained, there would be little or no longrun financial problems with the system.

Table 20.—REPLACEMENT RATES OVER TIME (AGE 65 RETIREE)

Year of retirement	Worker alone			Worker with spouse		
	Low earner [1]	Average earner [2]	Maximum earner [3]	Low earner [1]	Average earner [2]	Maximum earner [3]
1940	40	26	17	60	39	25
1952	37	26	24	55	39	36
1965	40	31	33	60	47	49
1973	61	39	35	92	59	53
1985	61	44	26	92	66	39
2020 and later	55	42	28	83	63	43

[1] Worker who always earned the Federal minimum wage.

[2] Worker who had average steady earnings over his work years (i.e., average of covered workers).

[3] Worker who always earned at a level equal to the social security taxable earnings base.

Source: Tables supplied by the Office of the Actuary, Social Security Administration, Nov. 19, 1982.

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[90] Thus, in order to achieve the same savings obtained by a benefit formula constraint, a heavier cut must be imposed on retirees.

Critics of constraining the growth of initial benefit awards raise many of the same objections that are posed about proposals for raising the retirement age—that social security benefits are still not very substantial for most workers, that private pensions and other private resources won't fill the gap, and that the percent of elderly persons in poverty will go up again if benefits are reduced by the magnitudes currently under consideration. They argue that this type of constraint could be imposed later if and when the adverse demographic events currently projected actually begin to appear. They also are concerned that these changes are being promoted because they are not visible, being so technical that the public would not understand them (and if the public did understand, it would object). They further are fearful that even modest steps taken today to deal with the system's financial problems will be followed by similar future steps—a sort of piecemeal erosion of the role of the social security system (and thereby further erode public confidence that the social security benefit package can be counted on in the future). This is particularly relevant with respect to proposals that would have replacement rates decline for a lengthy period of time. While the public may be fearful today that social security's role in providing retirement income might decline, this type of change would actually build this image into the system, increasing the fears already held by the public.

(8) MAKE SELECTIVE BENEFIT CUTS

Many people have the impression that the social security program is loaded with nonessential benefits—benefits that really are not directed at meeting the basic goal of replacing a worker's lost earnings (or that they do so excessively)—and that if these extraneous provisions were repealed or modified, the system could be restored to sound financial condition.

What is not generally recognized is that this, in fact, has been a strategy already employed by Congress since 1977 (whether consciously or not) and many provisions have been enacted eliminating or limiting benefits in some way. Counting the 1977 Social Security Amendments (which made a number of relatively small benefit deliberalizations, as well as a major benefit formula overhaul), there have been four separate pieces of legislation enacted over the past 5 years containing numerous cash-benefits constraint measures.[91] Some of them have been controversial even though in the aggregate they involved relatively small amounts of savings. Many would argue that the most obvious "easy to remove" (or alter) provisions of the program were repealed or modified by these amendments, and that there are not a whole lot more of them left from which one could extract significant amounts of savings.

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[91] These acts include: the Social Security Amendments of 1977 (P.L. 95-216), the Social Security Disability Amendments of 1980 (P.L. 96-265), the Omnibus Budget Reconciliation Act of 1980 (P.L. 96-499), and the Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35). Numerous other constraint measures, affecting the HI program were enacted with the Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248). Even with the passage of two sets of liberalizing cash benefits amendments, P.L. 96-473 and P.L. 97-123, on aggregate significant savings are projected to arise from the legislation enacted during the past 5 years. At the time of enactment of each of these amendments, the following savings were estimated to arise (cumulatively through calendar year 1986):

Continued

Granted, there is still a very substantial amount of benefits that is paid to persons other than the worker who contributed to the system, but it would be misleading to characterize them as miscellaneous "nonessentials." They are often well recognized and long accepted forms of benefits. The idea that a provision is nonessential to the basic goals of the program (or that it has questionable value) may be something that is simply "in the eyes of the beholder." Others may not agree. To the extent, for instance, that one views the system as a broad social insurance, income transfer program, the notion that spouse's or children's benefits are nonessential would be challenged. Furthermore, to the extent that a particular provision involves a substantial amount of money (although relatively small when the aggregate size of the program is considered), that fact alone is likely to make its removal (or alteration) very controversial—simply because large sums of money usually imply that a significant number of people will be affected. If one were then to propose a string of such "moderately" controversial (but limited) reductions, the package in aggregate is likely to stir up as much controversy as any really major benefit cut.[92]

Thus, the idea that a lengthy laundry list of limited reduction measures would provide a palatable solution to the system's financial woes, with relatively minor political squabbles, might be a delusion—that a small number of minor reduction measures might produce limited savings within the context of a major set of financing measures probably would be a more prudent view of their utility.

Probably the two most talked-about types of selective benefit constraints are those that would tighten up the eligibility requirements for social security (the argument being that it is too easy to obtain social security credits) or to cut back on the payment of benefits to dependents or what program specialists call "auxiliaries" (a worker's family members). The thrust transcending both types of changes is that those who have not contributed (or have not contributed enough) should be precluded from getting benefits

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BENEFIT SAVING FROM VARIOUS AMENDMENTS TO SOCIAL SECURITY

[In billions of dollars]

1977 amendments (P.L. 95-216)	1980 amendments (P.L. 96-265, P.L. 96-473 and P.L. 96-499)	1981 Budget reconciliation (P.L. 97-35)	Minimum restoration (P.L. 97-123)
22	7	27	[1] 11

[1] Cost.

NOTE.—These estimates are not addable across because of the different assumptions underpinning them.

[92] An example of this is the adverse reaction (including an almost complete lack of congressional interest) to President Carter's fiscal year 1980 budget proposals for social security. This package which the administration transmitted to Congress as a draft bill in April 1979 (cited as the Social Security Amendments of 1979) contained seven relatively modest reduction measures for the cash benefits programs. A strong negative response was voiced immediately by many groups representing the elderly and other social security recipients (and included a number of in-house or close advisors to the administration on social policy). As a consequence, no serious interest was aroused in the House Ways and Means and Senate Finance Committees.

(or that they should get less). They logically appeal to those wanting to strengthen the earned-right aspects of the program.

(a) TIGHTENING UP ELIGIBILITY REQUIREMENTS

Among the proposals suggested for tightening up entry to the program are those which would require longer or more substantive attachment to the work force than is currently necessary for eligibility. Most workers covered by the system will need 40 quarters of coverage, or 10 years of work, to eventually qualify for retirement benefits (persons becoming newly eligible for retirement benefits before 1991 actually will need less). Some critics argue that the 10-year requirement is too short. It does not represent lengthy attachment to the work force, and it is inequitable that some workers who work for only 10 years get the same benefits as a lower paid worker who works for 40 or more years. Others do not find the 10-year requirement to be objectionably short, but they argue that the amount of earnings required to obtain a quarter of coverage is too low. In 1983, a worker will get a quarter of coverage for each increment of $370 of earnings that he has that year. He can get as many as four quarters with as little earnings as $1,480 for the year. Even someone who works 20 hours a week at the minimum wage, would earn $3,500 a year. They contend that the quarter of coverage dollar amount does not have to be as low as it is to permit access to the program to low wage earners.

Still others argue that since the program does not take length of service into account in computing benefits, the 10-year requirement is too loose. While "zeros" might be included in a worker's earnings record for years of no earnings, the lower "average earnings" this produces will allow him to be advantaged by the tilt built into the benefit formula for career low-wage earners. Consequently, many long-term housewives (with spouses who have substantial earnings, and later substantial social security and pension benefits) as well as many Government workers (who spend most of their work lives in employment covered by a Government pension system) are allowed to take advantage of the tilted social security benefit formula. They are often not low-income persons but appear so because of their limited attachment to employment covered by social security.

In the disability insurance area, critics sometimes argue the current requirement, under which a disabled worker must have been recently attached to the labor force, is not stringent enough. Generally, it requires that the worker must have worked in 5 of the 10 years preceding the point at which he became disabled. If disability benefits are supposed to replace earnings lost because of a disabling condition, they argue that allowing someone to get benefits who has not worked in the 5-year period before becoming disabled is not an effective measure of recent labor force attachment.

Advocates of maintaining social security's current entry requirements argue that tightening up eligibility "goes for the jugular." Savings are obtained not by merely reducing someone's benefit level—they arise from precluding benefits altogether (in some cases, however, it may actually only represent a delay of payments). They also argue that it affects not only the well-off housewife and Government worker, but very low-wage earners, such as domestics, migrants, and mentally and other chronically disabled persons—some of the most economically vulnerable members of society. In the disability area, it is argued that the 5 out of 10 years of recent-work requirement already is too stringent for many chronically disabled people (and, for instance, someone who has been out of the work force for a lengthy period of time, but reenters and becomes disabled within a 5-year period). Depending on the stringency of the new eligibility requirements, some would argue that such changes undermine the concept that the program provides a "minimum floor of protection." Finally, it runs counter to many of the so-called "women's concerns" by making it harder for women who leave the labor force (perhaps to raise children) or enter the work force late in life (perhaps because of a divorce) to obtain or retain credit toward their own "earned" benefits.

(b) CONSTRAINING AUXILIARY BENEFITS

The issues surrounding the payment of auxiliary benefits are more complex than those dealing with the system's entry requirements. They are heavily overshadowed by what have become known as social security's "women's issues." Currently the program provides benefits to a worker's spouse in addition to the worker's own benefits. In addition, benefits are provided to the worker's dependent children. It is the spouse's benefit, however, that creates the high degree of controversy.

This benefit is equal to 50 percent of the retired worker's benefit (100 percent if the spouse is a widow or widower). It was enacted into law in 1939, just before the program first began paying out benefits. It reflected the typical family roles of the time—the husband being the source of income to the family and the wife being a homemaker. It also reflected the presumption that most marriages would be lifelong.

What has happened since 1939 is that we may no longer be able to view these family circumstances as "typical." They certainly are still the dominant circumstances, but not to the degree they were in 1939. The labor force participation rate of married women has almost tripled, having risen from 17 percent in 1940 to 47 percent in 1977. Married women who work now number about 25 million persons and account for nearly 25 percent of the paid labor force, up from 9 percent in 1940. Marriage longevity has also changed, with divorce being much more prevalent. As a consequence, many critics of the spouse's benefit view it as somewhat of an anachronism.

The spouse's benefit also raises various questions of equity. The single worker often complains that he pays the same amount of taxes as the married worker whose nonworking spouse gets additional benefits. The two-earner married couple whose earnings are the same as those of a one-earner married couple complain that their combined benefits are less.[93] Similarly, two-earner couples frequently argue that they get nothing more for the contributions made by the second earner because that spouse frequently would have been entitled to a benefit even if he or she had not earned credits.

Numerous proposals have been made to alter both the amount of and circumstances in which benefits are provided to a married couple. Some would greatly increase the cost of the program, for instance, by providing social security earnings credits to a lifelong homemaker who may never have engaged in paid employment. Others would simply address the anomalies in the way single workers and one- and two-earner couples are treated—some creating costs, others savings. Regardless of the form, however, the basic motive of all such proposals is to remove the notion that the spouse's benefit is based on dependency.

Many would argue that the benefit expenditures associated with the spouse's benefit at a minimum should be redistributed. However, a discussion of how to reduce the costs of the program because of its financial problems cannot ignore the obvious choice of reducing or removing the dependent spouse's benefit from the program entirely.

One idea would be to eliminate the spouse's benefit, but then split the earnings of the two spouses in the couple in half so that the "tilt" in the benefit formula would be reflected in the computation of benefits for both spouses. In some instances, this would partially make up for the foregone benefits from not having a spouse's benefit.[94] A second proposal would be to freeze the maximum spouse's benefit at today's level. This would cause a phased erosion of the spouse's benefit, such that as time passed, the maximum would represent less and less as a percentage of the working spouse's benefit. Still another idea would be to create a flat-rate spouse's benefit, completely unrelated to the working spouse's benefit. Supporters would view this as making the benefit more effective as an income transfer element of the program.

Advocates of dampening the role of the spouse's benefit or removing it altogether see the change as strengthening the insurance or annuity features of the program. They often feel that social payments should be made out of welfare programs, such as supplemental security income (SSI). They see such a change as removing or lessening the anomalous situation where the higher the worker's benefits, the larger the "social payments" made to his spouse (or to his family for that matter). They also see it as the easiest remedy to resolve the many equity issues that surround the spouse's benefit.

Critics view any erosion of the spouse's benefit as a first step toward elimination of other social elements of the social security

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[93] The benefits of the one-earner couple are very frequently higher than those of the two-earner couple when the spouse's benefit is added to benefits paid to the working spouse in the one-earner couple.

[94] This offsetting affect would be most pronounced in one-earner couple situations and where there were wide disparities in the earnings of each member of two-earner couples.

system. The issue also becomes flammable because it is interwoven with larger and more controversial issues affecting women—their changing roles in the family and the workplace. Critics contend that while women may be altering their roles and spending more time in the workplace rather than the home, they still do not have the earnings levels and work histories achieved by men and that this is and will continue to be reflected in their social security benefits. Furthermore, while the criticism that is levied against the dependent spouse's benefit usually is built around the image of a well-to-do intact retired couple, proposals to alter the spouse's benefit, such as through earnings splitting, frequently ignore their effects on low-income couples and on widows and widowers, who presently make up the poorest segments of the elderly population.

(B) Unconventional Ideas

The term unconventional here means "boat rockers." These proposals represent a new wave of ideas to overhaul the social security system in a fundamental way, or change its role in society, by seeking to alter the pay-as-you-go or social welfare principles underpinning it. Solving the financial problems confronting the system is often not their primary goal. They do address the financial problems, but this is a secondary objective—the current problems are seen as symptoms of more basic contradictions requiring much more far-reaching changes. They basically evolve from a philosophical difference of opinion over how much of a role society at large (through the Government) should have for providing against lost income versus how much responsibility should reside with the individual to take care of himself.

Some want social security to take the more traditional form of insurance, private pension or similar private retirement or disability annuity. They want a system which is more equity conscious, such as what is found in the private sector, where benefits are tailored more directly to what an individual pays or contributes. They don't like the "social welfare" parts of social security.

The most visible area of discontent is in the retirement program, and it is in this area where this new wave of ideas is most heavily focused (although they frequently call for similar survivor and disability features). Unlike early death or disability, retirement is something that people usually plan for. Why then, it is argued, is it necessary today to have a "pooling of resources" to meet retirement income needs? Why can't each individual put money away while he works to provide his eventual retirement income? Going further, why does the Nation's basic retirement income program have to be a big income transfer program with one segment of the population having to provide resources for the retirement income of another segment of the population? Why couldn't a much smaller welfare-type program to deal with poverty among the elderly serve the social function of social security, while the private sector served the basic annuity function of the system? While social or welfare programs are usually best handled by governmental bodies, why does the Government have to run a $175 billion per year "money machine" for the vast bulk of the Nation's workers? While there may have been ample justification during the 1930's for a big Government income-transfer program to address both social and economic problems, does that need exist today?

These and many other interwoven questions are surfacing and forming the criticism underpinning the recent wave of new "individual-oriented" proposals (often involving not so new ideas) to completely overhaul society's approach to providing for retirement and against the risks of lost income due to early death and disability. These new proposals generally fall into one of two forms. The first builds on the idea of reducing the role of the social security system while giving a larger role to the private sector. They sometimes go so far as to suggest a wholesale dismantling of the system. The second variety builds on the notion of either removing or reducing the welfare or social functions of social security, or conversely, leaving these features in the program (although the program itself would be reshaped) and measuring a recipient's need to receive these welfare-type benefits. This latter variety generally falls within a category of reform known as "two-tier" or "double decker" systems.

The next two sections discuss these types of reforms.

(1) TURN THE FUNCTIONS OF SOCIAL SECURITY OVER TO THE PRIVATE SECTOR

Quite often proposals intended to give the private sector a larger role in providing income protection are mistakenly viewed as calling for voluntary social security or a simple dismantling of the system. More frequently, they do not. The concept imbedded in the present social security system of requiring a worker to set funds aside while he works to cover his income needs in periods when he does not work is usually carried along in one form or another.

They frequently have the goal of full or close to full funding of the individual's retirement and related income needs. Advocates see full funding through a Government vehicle such as social security as undesirable both for pragmatic and philosophical reasons. They see private sector alternatives as the way to achieve the financial security of full funding without the ill effects, economic and political, of concentrating enormous sums of capital and wealth in the hands of a single political entity. Furthermore, they want the individual to advance fund for himself and thereby create a more direct relationship than exists with the current system between what he puts away through his own productive efforts and what he actually gets when his earnings stop. They view the current social security system as creating an illogical maze in moving between contributions and benefits. They view it as having just enough "equity" features to give the image of "getting what you pay for," but masking the fact that it is a massive income-redistribution, social-welfare program. As such, they see it as encouraging consumption rather than savings, and thus inhibiting capital formation and economic growth.

(a) COMPLETE DISMANTLING OF THE SYSTEM

Under this approach workers would stop paying social security taxes and contribute to a private sector plan instead—an IRA, private pension system, etc.[95] The obvious question with such a change is where would the resources come from to pay the benefits of current beneficiaries and those nearing retirement. They would continue to be on the benefit rolls of the old system for many years into the future. Thus, if the existing work force were to no longer contribute to the old system, how would the system sustain itself while it was being phased out? The knee-jerk response is that it would come from the Government's general fund, but adding a $175 billion a year drain on the already deficit-ridden general fund would hardly attract significant support. More practical plans would call for a gradual or limited dismantling of the system. However, even these approaches must overcome an enormous transitional cost hurdle.

For instance, if the new system were to be applicable only to new entrants to the labor force (i.e., only persons over the age of 20 at a particular point in time would participate in social security from then on), within a very few years the system would have lost very substantial amounts of revenue as the ranks of the newer generation of workers grew. The aggregate amount of near-term benefit payments, on the other hand, would not decline much since older workers would continue to draw on their benefit rights (had younger workers remained in the system, they would only have been drawing on it in the rare instances of early death or disability). Within 10 years or so, possibly 25 percent or more of the work force would not be paying anything into the social security system. If the revenue loss were of equal proportion (i.e., 25 percent of what aggregate social security revenues would otherwise have been), some $40 to $45 billion per year (in 1983 terms) would have been diverted away from the social security program. Tax increases, benefit cuts or a general revenue infusion of an equivalent magnitude would have to be enacted in addition to the other changes needed to meet the deficits projected for the coming decade under current law. The deficiency would be even larger when one looks out into the next century when the baby boom generation reaches advanced age. By then, practically no one would be contributing to the social security system, yet only disability and a portion of survivor benefit costs would have been eliminated.

In simple terms, if one looked at the work force now 20 years old and older as a "closed group," the transitional cost of liquidating their benefit rights would be almost $6 trillion in present value terms (see table 10 in the "Pay-As-You-Go Versus Fully Funding Social Security" portion of this paper).

The related approach of making participation in social security optional has a similar hurdle of a somewhat less definitive magnitude. If a significant number of persons were to opt out, they would not likely be older workers who have accrued substantial benefit credits. Public opinion polls suggest that more likely they would be younger workers. Therefore, the system would lose revenues without any immediate, noticeable curtailment of its benefit payments. Furthermore, the workers who did opt out would have to be compensated in some way for the contributions they already made to the system up to that point (this might be thought by some to be the key incentive to get them to do so). This compensation likely would be in the form of either a refund of the worker's contributions (plus some factor for accrued interest) or an accrued right to some "limited" benefits in the future. If refunds were provided, this would immediately augment the deficiency problem caused by the fact that these workers would no longer be paying social security taxes. If the "deferred 'limited' benefits" approach were adopted, it would postpone the "compensation" burden on the system until the worker joined the roll later in life. In either case, the loss of tax revenues and the need for compensation payments would create an enormous transitional cost hurdle in moving to the new system.

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[95] Assuming for simplicity's sake that social security disability and survivors protection was immediately replaced by mandatory disability and life insurance acquisitions.

Some have suggested that the recent reform of the Chilean social security system might provide an example of how the "transition problem" could be overcome in the United States. The Chilean program until recently was patterned after the European-style pay-as-you-go, social-welfare-type systems. In 1980, Chile engaged in a dramatic economic revitalization program heavily underpinned by reforms of its "numerous" social security programs.[96] The most radical reform was that of giving existing workers and those entering the labor force before May 1986 the option of sticking with the old system or paying into a new private sector program. The details of this new approach are not of import here, the main point being that the movement to the new system was to be phased-in and voluntary for much of the existing work force.[97]

There hasn't been a great deal of detail written about the Chilean plan, but the limited information available suggests that four basic facts of the changeover were being relied on to meet the transition hurdle. First, revenues were to continue to flow into the old system from those who did not opt for the new program. Second, the old system utilized a variety of capital assets which allegedly were to be liquidated to meet transition costs. Third, overall benefit payments under the old system were likely to be reduced to some extent, because workers who opted into the new program would have the contributions they built up under the old system transferred to the new one, but they would not be able to draw on the new program for 5 years (thus, their "compensation for past contributions" and "regular" benefit payments were being deferred).[98] Finally, the reform rested heavily on the premise that reduced labor costs and the influx of new capital into the economy (through the new private sector pension plans) would create significant economic growth and yield higher general revenues for the Government (although not explicitly acknowledged) which would then be funneled into the old system if necessary.

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[96] The old Chilean system was made up of more than three dozen different programs.

[97] A more elaborate description and discussion of the Chilean reforms can be found in an article in the May 1981 Social Security Bulletin by Barbara E. Kritzer entitled, "Chile Changes Social Security."

[98] A report in "The Economist" magazine of Apr. 17, 1982, suggested that some 50 percent of the Chilean work force switched to the new private sector plans in the first year.

As of the time of this writing the Chilean economy was in immense difficulty (its gross national product, for instance, declined by 12.7 percent in 1982)[99] although it would be unreasonable to attribute the situation to the changes made in its social security system. The worldwide recession and other internal economic circumstances were probably the major culprits. The point of the discussion here, however, is not to speculate on the success or failure of the overhaul of that social security system, but simply to note possible useful concepts and to point out a number of significant differences between Chile and the United States with regard to their social security "situations."

First, Chile's social security tax rates (unlike in the United States, there was more than one) had grown so high (for instance, 29 percent for the employer of white collar workers, and over 7 percent for the employees themselves) that they discouraged hiring, and tax avoidance was widespread. On the benefit side, although some of the multitude of old programs were generous, most workers had to face a drastic reduction in their standard-of-living when they retired because benefits were so low (some 70 percent of beneficiaries received only a "minimum" benefit). With retirement benefits being so inadequate, it was likely that many workers would have been willing to delay retirement in the hope of achieving a higher retirement income from one of the new private sector plans. In addition, the Government was already making a very large general fund contribution to sustain the system (28 percent in 1980) which was projected to grow by tenfold in 20 years.[100] And finally, social security expenditures had become a much greater part of the Chilean economy than in the United States. In 1979, social security expenditures represented 17 percent of Chile's gross national product—whereas in the United States, they only represented 5 percent.

While it would be unfair to draw a negative conclusion about the viability of the transitional elements of the Chilean program in the United States, it is fair to say that the circumstances for the transition elements of the Chilean changeover were far more conducive both politically and economically.

(b) EXPANDING THE PRIVATE SECTOR'S ROLE WHILE REDUCING SOCIAL SECURITY'S

Many analysts who support enhancement of the private sector's role in providing income protection do not advocate a complete dismantling of the social security system. Generally, they want a reorientation of roles. Some would completely ignore the social security program by trying to encourage (or in some cases, mandating) people to set greater resources aside for their retirement while they work. Others would call for a contraction of social security's role to make room (to free up resources) for a larger private sector counterpart. In either case, the immediate dissolution of the social security system is not the intended result.

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[99] Source: Central Bank of Chile, preliminary estimate, December 1982.

[100] Barbara E. Kritzer, "Chile Changes Social Security." Social Security Bulletin, May 1981.

(i) The Social Security Option Account

One such approach recently was developed by the Insurance Company of North America (INA). Under the INA plan, a worker could contribute up to $6,000 each year to an IRA or similar private sector retirement plan, and then take an immediate income tax deduction equal to the amount of the contribution.[101] However, for each $1,000 he contributed, he would forfeit one-half of 1 percent of his eventual social security retirement benefits. A person who contributed the maximum of $6,000 per year would completely erode his potential social security retirement benefits in 33⅓ years.

Since social security taxes would continue to flow into the system from these workers (while they were setting aside resources in a private plan), the financial condition of the social security system would not be further weakened by the proposal (i.e., any more than is projected under current law). Eventually, the system would reap a financial advantage as workers began to forfeit all or a portion of their social security retirement benefits.

This sort of change is directed primarily at higher earners since a worker who wanted to participate would have to come up with additional discretionary resources in order to make private retirement contributions. Average and low-wage earners would very likely not participate in any significant numbers, because they could not afford to do so. Even among high-wage earners, the propensity to contribute to a private plan would rest heavily on whether the worker felt the value of an additional income tax deduction would outstrip the value of his eventual social security benefits.

The INA plan, therefore, would not call for very much change to the social security system from its current form. However, it likely would be viewed as a possible first step toward complete voluntary coverage, and thus evoke considerable controversy. Critics point out that under the proposal the worker who contributed to his private sector plan could withdraw his contributions before retirement (while still forfeiting the pertinent portion of his social security benefits), and therefore side step the mandatory retirement planning principle imbedded in the current social security system. They further point out that those contributing to a private sector plan would soon criticize the fact that they also were making social security tax payments but would get little or nothing for them, and eventually demand relief from the social security tax. This targeted tax relief, in turn, would lead to tax relief for others, and subsequent changes would snowball into an optional social security system for everyone (and lead to a system which could not sustain itself).

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[101] Under the plan, the annual retirement contribution could not exceed 20 percent of the individual's earnings subject to the social security tax. Thus in 1983 terms, the annual limitation would now be $7,100.

(ii) Earmarking Projected Future Surpluses for the Private Sector

Another similar but more limited approach would be to earmark future social security surpluses for private sector plans. Under current actuarial projections, the cash benefits program are expected to buildup and maintain sizable future surpluses between 1995 and 2025. Furthermore, these surpluses are likely to be augmented by changes made today to deal with the system's current problems. Some who see the buildup of large reserves as undesirable would call for a reduction of the social security tax rates scheduled for this period. Others concerned about the projected poor financial condition of the HI program would want to reallocate the surplus portion of the OASDI tax rate to the HI program. However, those who might be opposed to either of such actions might want to divert the excess resources to private sector retirement plans.

In other words, the tax rates under present law would be left at the level presently scheduled for this temporary period of surplus, but the revenues would not be funneled into the social security system or the medicare program. As an alternative, the trustees of the social security program would periodically determine what portion of the OASDI tax rate was not needed to keep the reserves of the system above 50 or 75 percent of 1 year's outgo. If the existing tax rate were not needed to maintain these levels, then employers would be required to deposit the excess portion into private sector accounts (possibly with more stringent conditions for withdrawal than exist for today's IRA's).

This approach has the apparent advantage for some of not tampering with the benefit side of the cash programs (although foreclosing the use of the excess resources for the HI program might be seen as an initial step to curtailing HI benefits). It also ties the cash programs more closely to a pay-as-you-go standard and avoids the "ill effects" of building large "Government controlled" reserves. It further forces an examination of the expenditure side of the HI program and the factors driving up its costs, before making what some might view as "easy money" available to ease that program's problems.

Critics, however, would view this as setting a precedent for more substantial private sector "encroachment" on the role of the social security program. They also would be reluctant to preempt the use of the potential excess reserves, for they could help mitigate or provide a longer phase-in of the tax increases needed to sustain the benefits of the baby boom retirees. They further might want to make as much of a tax reallocation as possible to the HI program, because its currently projected long-range problem is so large that it is unlikely that expenditure constraints alone could be relied on to remove it completely.

(iii) Increase the Role of the Private Sector While Gradually Reducing the Percent of One's Earnings Replaced by Social Security

A related but more fundamental change would be to gradually slow down the growth of initial social security benefit awards in the future. However, as with the previous approach, rather than reducing the social security tax (as the relative cost of the program declined) or making alternative use of it, the tax rate would be left at the levels scheduled in the law, but with a portion earmarked for private sector accounts. Such an approach might call for a permanent or long lasting constraint on the growth of the social security benefit formula, by possibly limiting the growth of the bend points or reducing the bracket percentages in the formula. Social security benefit outlays would be constrained, and at some point in the future a portion of the then existing tax rate could be diverted to private sector plans. As with the previous proposal, the trustees of the social security program periodically would identify what portion of the tax rate would not be needed to keep social security reserves at or above say 50 percent or 75-percent of 1-year's expenditures. The employer then would be required to deposit the excess taxes (the portion not needed to sustain a reasonable cash-flow reserve for the program) into a worker's private retirement account.

This approach goes farther than the previous one because it actually creates a very substantial longrun surplus in the program, rather than merely anticipating the limited surplus projected for the 1995–2025 period. It goes farther than is necessary to eliminate the entire 75-year deficit appearing under current projections. For instance, if the bend points in the benefit formula (and a worker's earning history) were increased to reflect changes in prices rather than wages, the estimated cost of the cash benefits program would fall to 10.1 percent of taxable payroll in the year 2005. Its portion of the tax rate currently is scheduled to be 12.4 percent. Thus, at that point, 2.3 percent of taxable earnings could be put aside by the employer into a private sector account.[102]

A similar financial effect could be achieved by gradually reducing the bracket percentages in the benefit formula over 30 years (beginning in 1985) from 90/32/15 to 63/22/11.

Under this approach, the percent of a worker's earnings that social security replaces would decline gradually (the nominal benefit levels themselves would still rise, but each successive cohort of retirees would start out with lower replacement rates), and a private sector plan would be expected to take the place of the foregone social security benefits. The degree to which total replacement would be greater or less than under the current system would depend upon how successful the private sector investment had been.

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[102] The estimates assume the proposal became effective in 1985. The total estimated average savings from the proposal for the entire 75-year valuation period are 2.83 percent of taxable payroll, which would turn the current longrun projected deficit of 1.8 percent of payroll into a surplus of 1.03 percent of payroll (once again on average for the entire 75-year valuation period). These estimates were supplied by the Office of the Actuary of the Social Security Administration to the author on Jan. 19, 1983, and were based on the intermediate II–B economic assumptions in the 1982 trustees' report.

Opponents of this approach would argue that it would cause a reduction in income protection for the wrong segments of the future beneficiary population. Since social security's role would be reduced across-the-board (although, once again, not in nominal dollars), those who would lose the most from this two-directional change are those who are advantaged the most by the current social elements of the system—low-wage earners and workers with families. A portion of the "income redistribution" they now receive through the present system would be removed. Conversely, those who would get the lowest replacement rate under the current system—single high-wage earners—would get the most out of the change since more of their aggregate retirement income (relative to current law) would come from a private retirement program (this is the group not expected to recover the value of their social security contributions in the future). Critics, therefore, would argue that it reduces protection for those most in need, while enhancing it for those best able to take care of themselves.

Some might argue that this criticism could be mitigated by only reducing future replacement rates for those with the highest wages.[103] Thus, constraints on future social security benefits would be concentrated on those who had the highest earnings, while freeing up resources for everyone to deposit in a private sector retirement account. This, however, likely would be opposed by those who already feel the social security system will not give them their money's worth, and the system's proponents might feel that further cutting of the higher earner's replacement rate might add fuel to the fire of those who want to get out of social security completely.

(2) REDUCING THE WELFARE FEATURES OF THE SYSTEM

Some critics find social security to be a wasteful and inefficient way of reducing poverty among the affected population. They see the primary cause being that the program does not measure the wealth of its recipients before making benefits available. It makes two key presumptions about circumstances in which "need" exists, and its benefit provisions are tailored accordingly.

The first is that low-wage earners are poor. Since a worker's average earnings, for benefit computation purposes, are determined using the earnings from a substantial portion of his career, the system implicitly assumes that if the average is low, the worker is a low-income worker. The second is that a worker with a spouse or family needs greater benefits than a single person. Thus, the benefit formula is "tilted" to provide a higher return on one's earnings the lower one's average earnings are, and benefits are provided to spouses and children of the worker to supplement the benefits the worker himself receives. No means-test is used.

Critics argue that not all low-wage earners are low income. For instance, a worker who has spent most of his career working in a Government job which was not covered by social security may have had substantial earnings, and he may be entitled to a substantial pension from a Government staff retirement system. However, he also may have had some attachment to the social security system from a moonlighting job, or from working in employment covered by social security before or after his Government career. His average earnings from covered employment might be low, but only because his covered employment was not his principal occupation. In effect, the social security system views him as a low-wage earner, but he may not have been.

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[103] This might be accomplished by slowing the growth of only the second "bend point" in the formula or reducing the percentage rates in the second or third bracket of the formula.

Similarly, a career housewife may have had sporadic attachment to covered employment, or have worked in only a portion of her adult life, but her time in the work force was sufficient to make her eligible for social security benefits. While she may have a spouse who had substantial earnings during his career, she too will benefit from the "social weighting" in the benefit formula because she appears to be a low-income individual.

Critics have an even harder time with the provision of dependent's benefits, particularly with the fact that the spouse's or child's benefit is scaled according to the size of the worker's own benefit. The larger his benefit, the larger will be the dependent's benefit. If these benefits are supposed to be based on presumed need, the critic asks "why should the size of the worker's own benefits determine the size of the benefits paid to his dependents?" Conversely, why don't the families of the lowest wage earners receive the largest dependent's benefits. In neither instance has the worker paid directly for the "additional" benefits paid to his family members.

In addition, the provision of these dependent's benefits are perceived to cause substantial inequities between single workers and couples and between couples in differing circumstances. For instance, a single worker receives less benefits than a couple whose working spouse had the same career earnings as the single worker. The working spouse in the couple paid nothing for the added benefits given to the nonworking spouse. Similarly, a single-worker couple can potentially receive higher benefits than a two-worker couple with the same combined earnings. Related inequities exist for widows and widowers who were in like circumstances when their spouses were living. Still others complain that they receive nothing more for the contributions made by their lower earning spouse—that the dependent spouse's benefit would have been paid regardless. They don't understand why they can't receive a dependent spouse's benefit in addition to the benefit "earned" by the lower earning spouse.

These equity-oriented questions form an undercurrent of criticism which has manifested itself in a number of proposals calling for new ways of distributing social security benefits. In contrast to those who would like to dismantle or substantially reduce the role of the social security system, these critics would simply like to remove from the system as much of its welfare features as possible. If social security is going to operate on a pay-as-you-go basis, then it already has given up the most fundamental "equity link" between the individual and his benefits, since the aggregate amount of the worker's contributions do not determine the amount of his benefits—available resources at some later time will be the primary determinant of that. Their principal concern is with the lack of equity that exists in the treatment of workers of roughly similar ages, and with the perceived "waste" built into the system because its "social" payments are not targeted efficiently toward those persons most in need.

(a) TWO-TIER BENEFIT PROGRAMS

The primary objective of these types of plans is to separate the social or welfare features of social security from its annuity functions. While the financing issue is more or less a secondary one, advocates like to point out that expenditures would be reduced under two-tier plans since payments to those not "in need" would be reduced. While numerous two-tier plans have been proposed, they generally fall within one of two very different frameworks.

One has a first tier which provides what might be considered a "universal benefit" payable to everyone at a certain age. It likely would be a flat dollar amount, and it would not be means-tested. This tier presumably would take the place of the weighting in the benefit formula and dependent's benefits of the current system. A worker would then supplement this first tier with an "earned" benefit from working—the second tier benefit. The amount he receives from this second tier would be directly proportional to the amount of his average earnings—the tilt in the current formula would be removed (by having benefits computed as a flat percentage of his average earnings).

The second approach would first establish a specified dollar amount as the accepted national "minimum income guarantee." As in the first approach, a worker would get an "earned" benefit from his work based on a flat-rate benefit formula. However, the tiers would be reversed. If his earned benefit were less than the "guarantee level," he would receive a supplement to bring him up to that level. The supplement, however, would be based on his "need" as determined by a means-test. If his earned benefit exceeded the guarantee level, he wouldn't get a supplement.

The welfare tiers of either of these plans presumably would be financed from general revenues and the current means-tested supplemental security income (SSI) program would be replaced or interwoven with the new "welfare" tier.[104]

Advocates argue that the current system does not address its social or welfare goals effectively. They argue that it provides "social-type" benefits to persons of substantial means (for instance, the larger a worker's benefit, the larger will be his spouse's benefit, thus a minimum-wage earner today is paying for the relatively large family benefits provided to a wealthy retired couple). They argue that dividing the program's welfare and annuity features apart would lessen or eliminate these "wasteful" benefits. They further argue that creating "individually based" earned and supplemental benefits would remove many benefit inequities that exist between single workers and couples, and between one- and two-earner couples.

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[104] With regard to the second type of two-tier plan, it often is suggested that the welfare tier be made more liberal than the current SSI program by lowering the age for eligibility for benefits, raising the standard benefit levels, loosening the means-test, or adopting new categories of eligible persons.

Critics of this type of system argue that these approaches would create greater social stratification. The current system does not label any portion of its benefits as welfare, and avoids many of the connotations and images of welfare-type programs. They feel that by creating this welfare "stigma," the worker's support for the system would be eroded. They also argue that benefits would be reduced for many "nonwealthy" dependents and survivors. They further argue that this type of change would not necessarily bring about any further financial security to the system, since it would merely move the costs from one fund to another, and any inherent weaknesses of "pay-as-you-go" financing would carry over to the new "earned-benefit" tier.

(b) LESSEN THE "WEIGHTING IN THE BENEFIT FORMULA" OR ELIMINATE THE "SHORT-SERVICE" BONUS

Another whole set of ideas to reduce some of the social aspects of the system would be to compute the basic benefits differently. These proposals are more narrow in scope than the proposed two-tier systems, addressing only the social features built directly into the manner in which benefits are computed—not the provision of dependent's benefits or the pay-as-you-go principle.

The first would lessen directly the "tilt" or "weighting" in the benefit formula. Currently, the benefit formula heavily favors the low-wage earner by replacing 90 percent of the worker's first $254 of average earnings, 32 percent of the next $1,274, and 15 percent of the remainder. Critics point out that long-term, low-wage earners do not need this degree of weighting to get reasonably adequate benefits out of the system. They point out that a full-time minimum-wage earner gets retirement benefits of $368 per month today (at age 65),[105] representing 55 percent of his before tax preretirement earnings (83 percent if he has a spouse). They also argue that well-off Government workers and housewives are often recipients of the weighted benefit formula. They further point out that even a modest reduction of the weighting in the formula could improve the expected future returns on contributions for high-wage earners, and possibly mute their criticism that they won't get their money's worth from social security.

Critics of reducing the weighting in the formula argue that socially it would direct benefits to the wrong segments of the beneficiary population. They argue that social security should not be viewed from a "rate of return" perspective, since it has such a large social function. They argue that what this type of change would amount to is a transfer of benefits from those most in need to those who have substantial incomes. They further argue that this would be a perverse change to make in a major Government program heavily ladened with income redistribution objectives.[106]

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[105] Using a worker who retires in January 1983 as an example.

Another related but more targeted proposal would be to lessen or eliminate what is known as the "short-service bonus." As previously mentioned, a person who works in employment covered by social security for only a short portion of his career often is advantaged by the weighted benefit formula—the noncovered Government worker and housewife are the most vivid examples. They may have had fairly substantial earnings levels during the period in which they worked in employment covered by the system, and therefore the weighting of the formula would not ordinarily have advantaged them. However, because of their many years of no-covered service (zeros in their earnings record), their average earnings for benefit computation purposes is relatively low. While their benefits also are low (in nominal terms) as a consequence, they do get to take advantage of the tilted benefit formula and, thus, receive a large return relative to their average earnings. A worker who worked steadily in covered employment at an average earnings level for half his career (say 20 years) gets benefits equal to more than half of those of a worker with steady average earnings who worked in covered employment for a full career (40 years). In effect, he gets what is called a "short-service bonus." Critics of this bonus argue that it should be eliminated by taking length of service into account, thereby leaving the basic benefit formula untouched for the long-service worker. They point out that most Government staff retirement programs and many private pensions have a factor to take account of how long a person worked under the system.

Those opposed to this kind of change again argue that it directs benefit cuts at the wrong segments of the population. Persons with intermittent attachment to the covered employment are very often low-income people who, due to poor health, lack of educational opportunity or other reasons, were not able to sustain jobs for lengthy periods of time. Others point out that the short-service bonus affects women favorably. They argue that women often do not have the same opportunity as men for obtaining long periods of creditable service, because they frequently leave the work force for substantial periods during their prime working years to raise families. They argue that there already are serious inequities in the social security system in the way women are treated, and that this change would move in the wrong direction toward resolving them.

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[106] To address these complaints, a reduction of the weighting often is coupled with the idea of introducing a larger special minimum benefit to avoid any reduction in benefits for truly low-wage earners who have worked for many years. In the absence of other cost reduction measures, however, this modification likely would carry substantial costs.

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Appendix A

HISTORICAL SUMMARY OF SOCIAL SECURITY LEGISLATION[1]

1935: The Social Security Act (Public Law 271, 74th Cong.) passed, following the recommendations of the Committee on Economic Security and of President Franklin D. Roosevelt. It established a system of Federal old-age benefits covering workers in commerce and industry. Benefits were to be based on cumulative wages and to be payable beginning in 1942 to qualified persons aged 65 and over. A payroll tax of 1 percent each on employers and employees, payable on a wage base of $3,000, was to be imposed as of January 1, 1937, and was scheduled to rise in steps to 3 percent by 1949. Congress rejected both the Clark amendment, which would have exempted employers with private pension plans, and a provision for sale of voluntary annuities by the Government.

1939: The Social Security Act Amendments of 1939 (Public Law 379, 76th Cong.) passed, following the recommendations of the 1937-39 advisory council and of President Roosevelt. It authorized supplemental benefits for dependents of retired workers and for surviving dependents in case of death. The starting date for monthly benefits was advanced to 1940, and benefits were based on average monthly wages rather than on cumulative wages. A tax rate increase to 1.5 percent, which was scheduled to take place in 1940, was postponed to 1943.

1942: The Revenue Act of 1942 (Public Law 753, 77th Cong.) deferred the tax rate increase until 1944.

1943: House Joint Resolution 171 (78th Cong.) postponed the tax rate increase until March 1, 1944.

1944: The Revenue Act of 1943 (Public Law 235, 78th Cong.) passed on February 25, 1944, continued the tax rate at 1 percent until 1945 and included the Murray amendment authorizing the use of general revenues to make up any financial deficit in social security.

1945: The Revenue Act of 1945 (Public Law 214, 79th Cong.) deferred the tax rate increase until 1947.

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[1] The summaries provided here for the period from 1935 to 1977 were taken from Martha Derthick's book: "Policymaking for Social Security." Washington: The Brookings Institution, 1979, pps. 429-432.

1946: The Social Security Act Amendments of 1946 (Public Law 719, 79th Cong.) deferred the tax rate increase until 1948.

1947: The Social Security Amendments of 1947 (Public Law 379, 80th Cong.) deferred the tax rate increase until 1950.

1948: Congress passed a bill to exclude "certain vendors of newspapers or magazines" from the Social Security Act. President Truman vetoed the bill, and congress overrode the veto (Public Law 492, 80th Cong.). Congress also passed a joint resolution to prevent the executive from issuing new regulations defining the terms "employ," "employer," and "employee" under the Social Security Act. President Truman vetoed the resolution, and Congress overrode the veto: "The issue involved in the proposed regulations is whether the scope of social security coverage should be determined by the Congress or by other branches of the Government" (H. Rept. 1319, 80th Cong., 2d sess.).

1950: The Social Security Act Amendments of 1950 (Public Law 734, 81st Cong.) passed following the report of the 1947–48 advisory council, recommendations by President Truman, and prolonged consideration by Congress. Eligibility standards were liberalized. The amendments extended compulsory coverage to the nonfarm self-employed, except for certain professional groups (principally doctors, lawyers, and engineers), and to regularly employed domestic and farm workers. They authorized optional coverage for employees of State and local governments and nonprofit organizations and revised the definitions of "employment" and "employee." Benefits were increased by 77 percent, and the wage base was to be raised to $3,600 in 1951. The tax rate was allowed to rise to 1½ percent in 1950. Authorization to use general revenues was repealed, contrary to the recommendation of both the administration and the advisory council. Director O. C. Pogge of the Bureau of Old-Age and Survivors Insurance said of these amendments: "A tremendous advance in the long journey toward a universal, sound, and adequate means of providing security for all Americans through a method consistent with our system of individual incentives and free enterprise" (Director's Bulletin 169 to all bureau employees, July 27, 1950).

1952: The Social Security Act Amendments of 1952 (Public Law 590, 82d Cong.) passed. Benefits were increased by 12.5 percent.

1954: The Social Security Amendments of 1954 (Public Law 761, 83d Cong.) passed, following the recommendations of President Eisenhower. Compulsory coverage was extended to self-employed farmers, categories of farmworkers not covered by the 1950 amendments, and miscellaneous self-employed professional groups (architects, funeral directors, accountants). Voluntary coverage was extended to ministers and members of religious orders. With these amendments, coverage was almost universal except for Federal Government employees. The wage base was to be raised to $4,200 in 1955, and benefits were increased by 13 percent. Provisions were made for a "disability freeze" to protect workers from loss or impairment of benefit rights during periods of total disability. Congress permitted the tax rate to rise to 2 percent, under a schedule enacted in 1950, and in the 1954 amendments increased tax rates for the distant future (1970's).

1956: The Social Security Amendments of 1956 (Public Law 880, 84th Cong.) passed. Disability insurance benefits were added, payable at the age of 50. Women were permitted to retire at the age of 62 with actuarially reduced benefits. Coverage was extended to lawyers, dentists, veterinarians, and optometrists. The tax rate was increased by 0.25 percent to finance disability benefits. The wage base remained unchanged.

1958: The Social Security Amendments of 1958 (Public Law 85-840) increased benefits by 7 percent and raised the wage base to $4,800. Benefits were added for dependents of disability insurance beneficiaries, and the eligibility standard for disability insurance was liberalized. The tax rate was increased to 2.5 percent for 1959.

1960: The Social Security Amendments of 1960 (Public Law 86-778) eliminated the age limitation of 50 for monthly disability benefits.

1961: The Social Security Amendments of 1961 (Public Law 87-64) permitted men to retire at the age of 62 with reduced benefits and made miscellaneous liberalizations, such as an increase in widows' benefits. The tax rate was increased to 3.125 percent for 1962.

1965: The Social Security Amendments of 1965 (Public Law 89-97) passed. After years of debate health insurance for the aged became law. Benefits were increased by 7 percent. The tax rate was increased to 4.2 percent and the wage base to $6,600 for 1966. Miscellaneous liberalizations were enacted, and coverage was extended to doctors.

1966: The Tax Adjustment Act of 1966 (Public Law 89-368) passed, containing the Prouty amendment that automatically provided a flat monthly benefit at the age of 72.

1968: The Social Security Amendments of 1967 (Public Law 90-248) increased benefits by 13 percent, raised the wage base to $7,800, and made many miscellaneous liberalizations. The tax rate, under the schedule enacted in 1965, was 4.4 percent.

1969: The Social Security Amendments of 1969 (title 10 of Public Law 91-172, the Tax Reform Act of 1969) increased benefits by 15 percent. The tax rate, under a schedule enacted in 1967, was 4.8 percent.

1971: A 10-percent benefit increase was included in an act to increase the public debt limit (Public Law 92-5). The wage base was raised to $9,000. The tax rate, under a schedule enacted in 1969, was 5.2 percent.

1972: A 20-percent benefit increase and the automatic adjustment of benefits and the wage base were included in an act to increase the public debt limit (Public Law 92-336), passed in July. Automatic adjustments were to begin in January 1975. The benefit increase was made possible by a change in the method of making actuarial assumptions. The wage base was raised to $10,800 for 1973. The Social Security Amendments of 1972 (Public Law 92-603), passed in October, contained many liberalizations, such as increased benefits for widows and widowers, an increase in earnings permitted to beneficiaries, and a reduction in the waiting period for disability benefits. The tax rate for 1973 was raised to 5.85 percent.

1973: Public Law 93-66, passed in July, increased benefits by 5.9 percent as of 1974, but this legislation was superseded by Public Law 93-233, passed in December, which provided for a 7-percent benefit increase for March-May 1974 and a 4-percent additional increase for June 1974. Automatic adjustments were rescheduled to begin in June 1975. The wage base for 1974 was raised to $13,200.

1974-78: By automatic adjustment, the wage base was raised to $14,100 in 1975, $15,300 in 1976, $16,500 in 1977, and $17,700 in 1978.

1977: The Social Security Amendments of 1977 (Public Law 95-216) were passed to meet an unexpected deficit. The tax rate increase already scheduled for 1978—to 6.05 percent—was not changed, but an increase to 6.13 percent in 1979 was scheduled, along with higher tax rates for subsequent years. Wage base increases in excess of expected automatic adjustments were scheduled: $22,900 for 1979, $25,900 for 1980, and $29,700 for 1981. The formula for automatic adjustments was revised to control erratic effects of the 1972 formula.

1980: The Social Security Disability Amendments of 1980 (Public Law 96-265) were passed in June 1980 to deal with the rapid growth of the disability insurance program and various administrative problems. A stricter limit on the size of family disability benefits, measures to improve work incentives in both DI and SSI, and new administrative requirements in both DI and SSI were incorporated in the law. Public Law 96-473 was passed in October making various changes to the monthly measure of the social security retirement test, and restricting benefits to certain persons confined in penal institutions. The Omnibus Budget Reconciliation Act of 1980 (Public Law 96-499) was passed in December 1980 reallocating a portion of the DI tax allocation to the OASI program for 2 years and reducing the amount of retroactive benefits payable in retirement cases.

1981: The Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) was passed in August 1981 making various reductions in social security benefits. Among the cash benefit reductions were elimination of the minimum benefit for both current and future beneficiaries, a phaseout of the student benefit, limitations on who can receive the lump sum death benefit, and various other measures intended to reduce program costs. The Social Security Amendments of 1981 (Public Law 97-123) were passed in December 1981 restoring the minimum benefit for persons then receiving or eligible for it, permitting interfund borrowing through 1982, taxing the first 6 months of sick pay and containing various other administrative measures.

Appendix B

SUMMARY OF THE RECOMMENDATIONS OF THE NATIONAL COMMISSION ON SOCIAL SECURITY REFORM

On December 16, 1981, President Reagan promulgated Executive Order 12335, which established the National Commission on Social Security Reform. The National Commission was created as a result of the continuing deterioration of the financial position of the old-age and survivors insurance trust fund, the inability of the President and the Congress to agree to a solution, and the concern about eroding public confidence in the social security system.

The National Commission was composed of 15 members, eight Republicans and seven Democrats. Five members were selected by the President, on a bipartisan basis; five were selected by the Senate majority leader, in consultation with the Senate minority leader, on a bipartisan basis; and five were selected by the Speaker of the House of Representatives, in consultation with the House minority leader, on a bipartisan basis. The National Commission submitted its report on January 20, 1983.

The following is a list of the National Commission's recommendations that affect the financing of the social security program and their cost effects. It should be noted that the estimated savings and revenues can vary widely depending upon what assumptions are used.

(1) Increases in the OASDI tax schedule now in the law would be accelerated. The 1985 rate increase would be moved up to 1984, the 1985–87 rates would remain as scheduled under present law, part of the 1990 rate would be moved to 1988, and the rate for 1990 and after would remain unchanged. The HI tax rates for all years would remain unchanged. The resulting tax schedule would be:

[In percent]

Year	Employee and employer rate (each)			
	OASDI		OASDI-HI	
	Present law	Proposal	Present law	Proposal
1983	5.4	5.4	6.7	6.7
1984	5.4	5.7	6.7	7.0
1985	5.7	5.7	7.05	7.05
1986	5.7	5.7	7.15	7.15
1987	5.7	5.7	7.15	7.15
1988-89	5.7	6.06	7.15	7.51
1990 and after	6.2	6.2	7.65	7.65

For 1984, a refundable income tax credit would be provided against the individual's Federal income tax liability in the amount of the increase in the employee's taxes, over what would have been payable under present law. This proposal would bring $40 billion in new income to the system in 1984-89 and produce income equal to 0.02 percent of taxable payroll in the long run.

(2) The automatic cost-of-living adjustments (COLA) of OASDI benefits, beginning in 1983, would be delayed 6 months, so that they are payable in January rather than in July. The increase in the CPI for purposes of the automatic adjustments for any particular year is currently measured from the first quarter of the previous year to the first quarter of that particular year. This procedure would continue to apply for the adjustment in benefit amounts for 1983 (payable in early January 1984). However, for subsequent years, the comparison would be made on a "third quarter to third quarter" basis. This proposal would save $40 billion in 1983-84 and 0.27 percent of payroll in the long run.

(3) Mandatory OASDI coverage, would be extended, as of January 1, 1984, to all newly hired civilian employees of the Federal Government and all employees of nonprofit organizations. This proposal would produce $20 billion in new income to the system in 1984-89 and net longrun revenues of 0.30 percent of taxable payroll.

(4) Beginning with 1984, 50 percent of OASDI benefits would be taxable for persons with adjusted gross income (excluding OASDI benefits) of $20,000 (single) or $25,000 (married). Proceeds from such taxation would be credited to the OASDI trust funds. This proposal would produce $30 billion in new income to the system in 1984-89 and longrun revenues of 0.60 percent of taxable payroll.

(5) The OASDI tax rates for self-employed persons, beginning in 1984, would be equal to the combined employee-employer rates. One-half of the OASDI taxes paid by self-employed persons would be tax deductible. This proposal would produce $18 billion in new

income to the system in 1984-89 and longrun revenues of 0.19 percent of taxable payroll in the long range.

(6) A lump-sum payment to the OASDI trust funds would be made from the general fund of the Treasury for:

—the present value of the estimated additional benefits arising from the gratuitous military service wage credits for service before 1957;

—the amount of the combined employee-employer OASDI taxes on the gratuitous military service wage credits for service after 1956 and before 1983 (the cost of which is met, under present law, when additional benefits derived therefrom are paid). In the future, the OASDI trust funds would be reimbursed on a current basis for such employee-employer taxes on such wage credits for service after 1982; and

—the amount of uncashed OASDI checks issued in the past (which were charged against the trust funds at time of issue), estimated at about $800 million (one time payment with subsequent interest accruing therefrom).

The effect of these proposals is to add $20 billion to the trust funds in 1983, with a net effect in 1983-89 of $18 billion (due to some additional costs in 1984 and 1985). There is no long-range effect.

(7) Withdrawal by State and local government employees would be prohibited. Termination notices now pending would be invalid if the process of termination, which takes at least 2 years, is not completed by the date of enactment. This would produce $3 billion in new income to the system in 1983-89 with a negligible effect in the long run (actually it would retain revenues for the system that would otherwise be lost).

The other commission recommendations, which would have minor financial effects, are summarized in the following table:

National Commission's proposals having minor financial effects	Short-term savings, 1983–89 (billions)	Long-range savings (percentage of payroll)
Eliminate windfall benefits for persons with pensions from noncovered employment	+0.2	+0.01
Continue benefits on remarriage for disabled widow(er)s and for divorced widow(er)s	−.1	
Index deferred widow(er)'s benefits based on wages (instead of CPI)	−.2	−.05
Permit divorced aged spouse to receive benefits when husband is eligible to receive benefits	−.1	−.01
Increase benefit rate for disabled widow(er)s aged 50–59 to 71½ percent of primary benefit	−.1	−.01
Reallocate OASDI tax rate between OASI and DI		
Allow inter-fund borrowing from HI by OASDI for 1983–87		
Base automatic benefit increases on the lower of wage or price increases if fund ratio is under 20 percent, with catch-up if fund ratio exceeds 32 percent		
Increase delayed retirement credit from 3 percent per year to 8 percent, beginning in 1990 and reaching 8 percent in 2010		−.10

In total, the Commission estimated that its recommendations would increase OASDI trust fund assets by $168 billion by the end of the decade, and reduce the long-range deficit from 1.8 percent to 0.58 percent of taxable payroll. Alternative methods for solving the remaining long-range deficit were presented in the supplementary statements by the members of the Commission, but no consensus was reached.

Chapter IV

Medicare

by

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MEDICARE

INTRODUCTION

The medicare program was enacted by Congress in 1965 as a means of providing insurance protection for older people against the costs of health care. Subsequently, coverage has been broadened to include some disabled persons and certain individuals who suffer from end-stage renal disease.

Medicare (which is authorized under the provisions of title 18 of the Social Security Act) consists of two parts: Part A or the hospital insurance (HI) program and part B or the supplementary medical insurance (SMI) program. Hospital insurance helps pay the costs of inpatient hospital services, skilled nursing facility services and home health services. Supplementary medical insurance helps pay for the services of independent practitioners (primarily physicians), outpatient hospital services, laboratory services, and other medical and related services.

Medicare is by far the largest personal health care financing program in the United States and, except for social security, is the largest entitlement program in the Federal budget. The numbers of persons entitled to hospital insurance has steadily risen from 19.1 million in 1966 to nearly 30 million in fiscal year 1984. Enrollment in supplementary medical insurance grew from 17.7 million to more than 29 million during the same period.

More dramatic, however, has been the growth in spending for medicare. Total outlays during the program's first full year (fiscal year 1967) amounted to $3.4 billion. During fiscal year 1984, medicare outlays will reach $66.5 billion. Medicare accounts for more than 25 percent of national health spending for hospital care and for more than 17 percent of all such spending for physicians' services. Some of this phenomenal growth has been due to increases in the numbers of persons protected by the medicare program (e.g., the disabled) and some the result of increases in the quantities and composition of the health services provided to program beneficiaries. But most of the increase is the result of persistent inflation in the health care industry and in the economy as a whole.

Individuals gain eligibility for benefits under each part of medicare in entirely different ways. Eligibility for hospital insurance protection for most individuals is linked to entitlement to receive monthly social security retirement, survivors' or disability benefits or railroad retirement cash benefits.[1] the entitlement to HI benefits is ordinarily established automatically through work in employment that is covered by the social security or railroad retirement systems. Beginning in January 1983, all Federal employees, including postal workers, also became eligible for coverage under hospital insurance on the basis of work performed in the Federal work force, as well as any other work they may have performed that was subject to the social security or railroad retirement systems.[2] In addition to these regularly "insured" groups of workers (and certain of their dependents), a small number of uninsured older individuals were deemed (during the early years of the program) to be "transitionally insured" and eligible for insurance benefits, even though they had little or no work experience under social security or railroad retirement to qualify for cash retirement or survivors' benefits. Also, since 1972, other aged individuals not elibible for hospital insurance either on an insured basis or under the transitionally insured aged provisions may obtain part A protection by enrolling in the program and paying a monthly premium equal to the full actuarial costs of such coverage.

Coverage under the supplementary medical insurance (SMI), or part B, program is voluntary and must be elected. Any individual is eligible to enroll in the supplementary medical insurance program if he or she (1) is entitled to hospital insurance part of medicare *or* (2) has attained the age of 65 and is a resident of the United States and a citizen or an alien lawfully admitted for permanent residence who has resided in the country continuously for at least 5 years. Since the SMI program is distinct and independent from the HI plan, it is possible for a person to enroll in part B without being entitled to monthly social security or railroad retirement benefits.[3]

The financing aspects of the hospital insurance and supplementary medical insurance parts of medicare are also quite different from one another. Hospital insurance is financed primarily through an earmarked hospital insurance tax levied on employees, employers, and the self-employed for work covered by the social security and railroad retirement systems (and, beginning in January 1983, work with the Federal Government and the Postal Service). During calendar year 1983, each worker and employer pays a tax of 1.3 percent of the first $35,700 of covered employment earnings. Hospital insurance benefits and administrative costs for uninsured persons are financed through general revenue transfers and premium payments rather than through payroll taxes.

The supplementary medical insurance program is financed from the premiums paid by eligible persons who are voluntarily enrolled in part B and from funds appropriated and transferred from the general fund of the Treasury. Persons enrolled in the SMI program on or after July 1, 1982, pay a monthly premium amount of $12.20, slightly less than 25 percent of the benefit and administrative costs of supplementary medical insurance.

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[1] "Entitlement" means the attainment of age 65 or disability status, possession of either the required insured status conditions or relationship to a person who meets such conditions and the filing of a claim. It is not necessary to actually receive social security or railroad retirement cash benefits to be eligible for hospital insurance benefits.

[2] Sec. 278 of the Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248).

[3] Persons entitled to part A benefits (including those entitled by reason of end-stage renal disease) are automatically enrolled in part B, unless they indicate they do not want to be enrolled for such coverage.

In each of the last 2 years, Congress has enacted spending reduction legislation designed to curb the rapid increases in medicare outlays. Nevertheless, the financial integrity of program is still threatened, unless additional steps are taken to increase revenues, reduce expenditures or some combination thereof. The hospital insurance program, in particular, is in financial difficulty. Expenditures under this part of medicare are now exceeding program income, and the HI trust fund could be exhausted in calendar year 1987 (assuming no further borrowing from the fund to pay social security benefits takes place).

HOSPITAL INSURANCE (HI)

(A) Overview

During fiscal year 1984, it is estimated that nearly 30 million people will be entitled to benefits under the hospital insurance (HI) or part A portion of the medicare program. Of this number, 27 million are aged beneficiaries and 3 million are disabled individuals under the age of 65. Approximately 7.5 million (or 1 in 4) of the persons protected by hospital insurance will receive covered services during the year. During fiscal year 1984, expenditures for hospital insurance benefits will amount to an estimated $44.7 billion.

Table 1.—HOSPITAL INSURANCE PROGRAM DATA

[In millions of persons]

	Fiscal year	
	1983 (est.)	1984 (est.)
Persons with hospital insurance protection	29.2	29.7
Aged	26.2	26.8
Disabled	3.0	2.9
Persons receiving services	7.3	7.5
Aged	6.5	6.7
Disabled	.8	.8

Hospital insurance benefit outlays

[In billions]

Fiscal year 1982	$34.3
Fiscal year 1983	38.7
Fiscal year 1984	44.7
Fiscal year 1985	48.6

Individuals become entitled to hospital insurance, or part A, benefits in one of several ways. The vast majority (88 percent) of persons protected by HI are those who reach age 65 and who are entitled to monthly social security or survivor benefits or who are qualified railroad retirement beneficiaries.[4] Individuals who are 65 and who apply for and are determined to be entitled to monthly social security benefits (or to benefits under the Railroad Retirement Act) are automatically entitled to part A benefits beginning with the first day of the month in which they attain age 65. HI entitlement is provided even though some individuals do not actually receive any cash benefit payments—e.g., they may not yet have retired from work. Beginning in January 1983, employees of the Federal Government and the Postal Service will also become entitled to hospital insurance on the basis of employment with the Federal Government or the Postal Service, in addition to any other employment they may have had that is covered by the social security or railroad retirement systems.[5]

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[4] In general, this term includes groups of railroad retirement beneficiaries similar to those eligible for social security benefits under title II of the Social Security Act—e.g., old-age beneficiaries, widows, disabled workers, etc.

In addition to those covered under the part A program on the basis of age, approximately 2.9 million persons are entitled to hospital insurance on the basis of disability. Those covered include disabled workers under age 65; disabled widows and widowers between the ages of 50 and 65; certain disabled women age 50 or older entitled to mother's benefits; people age 18 and over who receive social security benefits because they became disabled before reaching age 22; and disabled qualified railroad retirement annuitants.[6] Hospital insurance protection on the basis of disability begins with the 25th month of entitlement to cash benefits. Coverage terminates the month the disability benefit terminates or the month following the month that a notice of disability termination is mailed to the beneficiary, whichever is later. HI protection on the basis of disability also terminates at the end of the month before the one in which the individual attains age 65, since such persons then become entitled to hospital insurance on the basis of age.[7]

Individuals of any age are also entitled to hospital insurance if they receive dialysis treatments or kidney transplantation for end-stage renal disease (ESRD) and: (1) meet certain work requirements for insured status under the social security or railroad retirement systems, (2) are entitled to monthly social security benefits or an annuity under the Railroad Retirement Act, or (3) are the spouses or dependent children of such persons.[8] Entitlement begins and ends at special times in the case of ESRD beneficiaries. It is estimated that about 33,000 persons will be entitled to hospital insurance benefits during 1983 on the basis of the end-stage renal disease provisions of law.

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[5] A special transitional provision in the law permits certain individuals aged 65 or older who lacked entitlement to social security or railroad retirement benefits to obtain hospital insurance coverage. Under the provision, a person who reached age 65 after 1967 must have three quarters of social security (or railroad retirement) coverage for each year elapsing after 1966 and before the year in which he or she attained age 65. No quarters of coverage were required for entitlement of anyone who reached age 65 before 1968. This special transitional provision ceased to apply to those who reached 65 in 1974 or later, since in those years the number of quarters of coverage needed to qualify for hospital insurance under the transitional provision would exceed the number required for fully insured status under social security. There are also other requirements for transitionally insured status relating to residency in the United States, to status as citizens or certain aliens admitted for permanent residence, and to the filing of an application for benefits. During fiscal year 1983, an estimated 452,000 persons will be entitled to HI benefits under the special transitional provision.

A third method of entitlement to part A benefits for persons aged 65 or older is voluntary enrollment in the hospital insurance plan, if such individuals are not entitled to coverage under the regular or transitionally insured provisions of law. An individual is entitled to voluntarily enroll in part A if he or she (1) has attained the age of 65, (2) is a resident of the United States, (3) is a citizen of the United States or an alien lawfully admitted for permanent residence (who has resided continuously in the United States for not less than 5 years immediately before the month of enrollment, and (4) is not otherwise entitled to hospital insurance. Such persons are also required to enroll in the part B program. Enrollees must pay a monthly premium based on the total cost of hospital insurance protection for the uninsured group. Effective July 1, 1983, the monthly premium charge for part A coverage under the voluntary enrollment provision will be $132; the amount is recalculated annually. An estimated 23,000 persons will enroll in the hospital insurance plan during fiscal year 1983 under the voluntary enrollment provision.

[6] Effective after Jan. 1, 1983, certain Federal employees also are entitled to hospital insurance on the basis of disability.

[7] There are also provisions that extend medicare HI benefits and entitlement for disabled beneficiaries who attempt to return to work or who give up or lose their disability benefits for other reasons.

Table 2.—BASIS OF ENTITLEMENT TO HOSPITAL INSURANCE, FISCAL YEAR 1983

Basis of entitlement	Number of persons (est.)
Total entitled to hospital insurance	28,983,000
Total aged	26,030,000
Entitlement to retirement or survivors' benefits	25,526,000
Transitionally insured aged	452,000
Uninsured aged voluntarily enrolled	23,000
Federal workers and dependent spouses	29,000
Total disabled	2,920,000
Workers	2,356,000
Widows and widowers	106,000
Others	458,000
End-stage renal disease	33,000

During each benefit period, the hospital insurance program pays the "reasonable costs" of the following services: [9]

- *Inpatient hospital care.*—Up to 90 days. For the first 60 days, the reasonsable costs of all covered services, except for an annually adjusted inpatient hospital deductible (currently $304). For the 61st through the 90th day, the reasonable costs of covered services, except for a daily coinsurance amount (currently $76 a day) equal to one-fourth the inpatient hospital deductible. An additional "lifetime reserve" of 60 hospital days may be drawn upon when more than 90 days per benefit period are needed. Each reserve day pays for all covered services, except for a daily coinsurance amount (currently $152) equal to one-half the inpatient hospital deductible. Special limitations apply in the case of care in mental hospitals.[10]

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[8] After Jan. 1, 1983, certain Federal employees and other individuals may also qualify for hospital insurance under the end-stage renal disease provisions.

[9] A benefit period begins the first time an insured person enters a hospital after HI coverage begins. It ends after he has not been an inpatient in a hospital or skilled nursing facility for 60 consecutive days. There is no limit on the number of benefit periods an insured person may have.

[10] The patient cost-sharing requirements under hospital insurance (i.e., the deductible and coinsurance amounts) are determined annually by law. For each year, the Secretary of Health and Human Services determines the inpatient hospital deductible on the basis of a ratio of the average amount paid per day for inpatient hospital services during the preceding year to the aver-

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- *Skilled nursing facility (SNF) care.*—Up to 100 days in skilled nursing facility for persons in need of continuous skilled nursing care and/or rehabilitation services on a daily basis. After the first 20 days, beneficiaries must pay an annually adjusted daily coinsurance amount (currently $38) equal to one-eighth the inpatient hospital deductible.

- *Home health care.*—An unlimited number of medically necessary home health visits by nurses, therapists, and other health workers for a homebound beneficiary in need of part-time skilled nursing, physical or speech therapy, and certain other services. No deductibles or coinsurance payments are required of beneficiaries for home health services.

Table 3.—BENEFICIARY COST-SHARING REQUIREMENTS UNDER HOSPITAL INSURANCE

Beginning	Inpatient deductible (IHD)	Daily coinsurance		SNF daily coinsurance after 20 days (⅛ x IHD)
		After 60 days (¼ x IHD)	After 90 days (½ x IHD)	
1966 (July 1)	$40	$10	(1)	(1)
1967	40	10	(1)	$5.00
1968	40	10	$20	5.00
1969	44	11	22	5.50
1970	52	13	26	6.50
1971	60	15	30	7.50
1972	68	17	34	8.50
1973	72	18	36	9.00
1974	84	21	42	10.50
1975	92	23	46	11.50
1976	104	26	52	13.00
1977	124	31	62	15.50
1978	144	36	72	18.00
1979	160	40	80	20.00
1980	180	45	90	22.50
1981	204	51	102	25.50
1982	260	65	130	32.50
1983	304	76	152	38.00

[1] Benefit not provided.

The hospital insurance program is financed primarily from amounts appropriated to the hospital insurance trust fund under permanent appropriation on the basis of taxes paid by workers and their employers, and by individuals with self-employment income, in work covered by the hospital insurance payroll tax.[11] In gen-

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age amount paid in 1966, multiplied by $45. The figure derived is rounded to the nearest multiple of $4 and is effective January 1 of each calendar year for any services furnished in such year. As noted above, the coinsurance amounts are determined as fractions of the inpatient hospital deductible. For years before 1982, the multiplier was $40.

[11] In general, such employment is the same as that covered by the social security (OASDI) and railroad retirement cash benefit programs. Beginning in 1983, employment with the Federal Government (except in very minor instances) is also subject to hospital insurance, but not to social security, taxes.

eral, an individual's HI contributions are computed on annual wages or self-employment income, or both combined, up to a specified maximum annual amount. The HI rates applicable to taxable earnings in each of the calendar years 1966–83 are shown in table 4. The maximum amount of annual earnings taxable in each of these years is also shown: [12]

Table 4.—HOSPITAL INSURANCE TAX RATES AND MAXIMUM TAXABLE AMOUNT OF ANNUAL EARNINGS

Calendar year	Maximum taxable earnings	HI tax rate (percent) [1]	Maximum HI contribution
1966	$6,600	0.35	$23.10
1967	6,600	.50	33.00
1968–71	7,800	.60	46.80
1972	9,000	.60	54.00
1973	10,800	1.00	108.00
1974	13,200	.90	118.80
1975	14,100	.90	126.90
1976	15,300	.90	137.70
1977	16,500	.90	148.50
1978	17,700	1.00	177.00
1979	22,900	1.05	240.45
1980	25,900	1.05	271.95
1981	29,700	1.30	386.10
1982	32,400	1.30	421.20
1983	35,700	1.30	464.10

[1] Rates on employee, employer, and self-employed, each.

For 1984 and thereafter, the rates shown below are the rates scheduled under provisions of present law:

Table 5.—HOSPITAL INSURANCE TAX CHANGES SCHEDULED UNDER PRESENT LAW

[In percent]

Calendar years	Maximum taxable earnings	Scheduled rate of HI tax [1]
1984	Subject to automatic increase	1.30
1985	Subject to automatic increase	1.35
1986 and later	Subject to automatic increase	1.45

[1] Employees and employers each and the self-employed.

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[12] For the period 1975–78, the maximum earnings amounts were determined under automatic provisions contained in section 230 of the Social Security Act. For 1979–81, these earnings levels were increased to specified amounts provided for in 1977 legislation. After 1981, the automatic increase provisions are again applicable.

Except for amounts received under State agreements (to effect coverage for certain State and local government employees) and deposited directly in the HI trust fund, all HI contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections. The contributions received are immediately and automatically appropriated to the HI trust fund on an estimated basis. Periodic adjustments are made to the extent that these estimates differ from the amounts actually payable on the basis of reported earnings.[13]

Table 6.—HOSPITAL INSURANCE TRUST FUND RECEIPTS BY SOURCE, FISCAL YEAR 1981

[In thousands of dollars]

Item	Amount
Total receipts	32,863,326
Appropriations	27,482,186
Deposits arising from State agreements	3,031,534
Gross contributions	30,513,721
Less amount for contributions subject to refund	88,500
Net contributions	30,425,221
Premiums collected from voluntary enrollees	20,759
Transfer from railroad retirement account	276,468
Reimbursement from general fund of the Treasury for costs of:	
Noncontributory wage credits	141,000
Benefits, administrative expenses and adjustments for uninsured persons	659,000
Interest	1,307,279
Certain other payments	33,600

(B) Financial Experience of the Hospital Insurance Program

In general, the financing principles employed in connection with the hospital insurance portion of medicare are similar to those employed in the social security cash benefit programs. That is, the hospital insurance program is designed to be self-supporting (regarding both benefits and program administration) from the HI taxes paid by insured persons and employers. Such financing also includes interest earnings and any net investment gains from available assets in the HI trust fund. The only exceptions to these principles are made in connection with coverage of a small number of uninsured individuals and voluntarily enrolled persons covered under the program; their costs are financed from general revenues and from premiums.

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[13] 1982 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund. In addition to tax revenues and funds received under State agreements, various payments to the hospital insurance trust fund from the general fund of the Treasury are authorized by law in connection with the costs of benefits and administrative expenses for noncontributory wage credits and for certain uninsured persons covered by hospital insurance. Other sources of trust fund receipts include transfers from the railroad retirement program on behalf of persons covered under that program, premiums collected from individuals not otherwise eligible for HI protection on an insured or uninsured basis, unconditional money gifts or bequests made for the benefit of the fund and interest received on investments held by the fund and interest on interfund transfers.

Under present law, the adequacy of the financing of the HI program is measured by comparing on a year-to-year basis the actual tax rates specified by law with the corresponding total costs of the program, expressed as a percentage of taxable payroll. If these two items are exactly equal in each year of a 25-year projection period, and all projection assumptions are realized, tax revenues together with interest income will be sufficient to pay for benefits and administrative expenses for insured persons and maintain the trust fund at a specified level. In practice, Congress has approved an HI tax schedule (see tables 4 and 5) with rate changes occurring at intervals of several years, rather than yearly increases to match exactly with projected cost increases. The actuarial balance of the hospital insurance program is defined as the excess of the *average* tax rate for the 25-year valuation period over the *average* cost of the program, expressed as a percentage of taxable payroll over the same period.[14]

Table 7.—LONG-RANGE FORECASTS OF THE HOSPITAL INSURANCE PROGRAM

[As a percentage of taxable payroll]

25-year estimate made in calendar year	Average cost [1]	Scheduled tax rate [1]	Actuarial balance
1966	1.23	1.23	....
1967	1.23	1.23	....
1968	1.38	1.41	0.03
1969	1.79	1.50	(.29)
1970	2.04	1.56	(.48)
1971	2.20	1.58	(.62)
1972	2.21	1.60	(.61)
1973	2.67	2.63	(.04)
1974	2.63	2.65	.02
1975	2.86	2.70	(.16)
1976	3.39	2.75	(.64)
1977	3.96	2.80	(1.16)
1978	3.86	2.74	(1.12)
1979	3.82	2.78	(1.04)
1980	3.80	2.81	(.99)
1981	4.28	2.84	(1.44)
1982	4.93	2.86	(2.07)
1982 [2]	4.34	2.86	(1.48)

[1] Average for the 25-year period, using intermediate range economic assumptions (II-B assumptions in recent years).

[2] Tax Equity Act.

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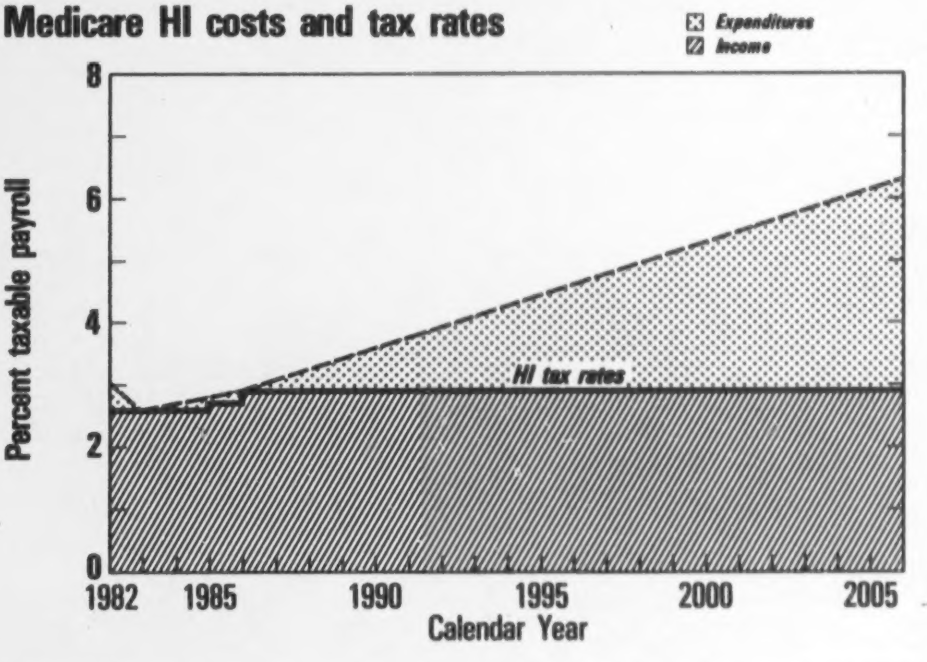
[14] Long-range (25-year) cost estimates for hospital insurance are made each year, in order to depict the pattern of rising costs that will take place if trends of the past continue into the future. Program trustees note that even a valuation period as long as 25 years may fail to present fully future contingencies that may be expected, as the result of certain demographic changes. The trustees also note, however, that the degree of uncertainty concerning future hospital costs, relative to the remainder of the economy, is sufficiently great to limit the usefulness of projections beyond 25 years.

Since its inception in 1965, the financial experience of the hospital insurance program has been unfavorable, in that the estimates of cost have repeately fallen short of projected and actual experience. The trustees of the hospital insurance trust fund have reported that, on a long-range basis, the HI program has been in deficit condition during 13 of the last 14 years: [15]

Provisions of the Tax Equity and Fiscal Responsibility Act of 1982 reduced the long-term costs of hospital insurance by 0.59 percent of taxable payroll, but this still leaves a projected actuarial imbalance in the program of 1.48 percent of payroll. To appreciate the magnitude of this long-range deficit, revenue to hospital insurance would have to be increased by about $20.7 billion (in 1982 terms) in *each* of the next 25 years, or by more than half a trillion dollars over the 25-year period (again in 1982 terms).[16]

(SEPTEMBER 1982 ESTIMATES)



The ratio of program expenditures to taxable payroll is shown below: [17]

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[15] Annual Reports of the Board of Trustees of the Federal Hospital Insurance Trust Fund. Estimates for 1982 after enactment of Public Law 97-248, the Tax Equity and Fiscal Responsibility Act, are from the Health Care Financing Administration.

[16] Taxable payroll for 1982 is estimated at about $1.4 trillion. Assumptions behind this estimate are discussed in section C of this part.

[17] 1982 Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund and the Health Care Financing Administration. Takes into account the effects of the Tax Equity and Fiscal Responsibility Act of 1982.

Table 8.—EXPENDITURES AND TAX RATES OF THE HOSPITAL INSURANCE PROGRAM

[As percentage of taxable payroll]

Calendar year	Expenditures	Scheduled tax rate	Difference
Historical data:			
1967	0.95	....	
1968	1.05	....	
1969	1.13	....	
1970	1.21	....	
1971	1.33	....	
1972	1.31	....	
1973	1.34	....	
1974	1.42	....	
1975	1.69	....	
1976	1.83	....	
1977	1.95	....	
1978	2.02	....	
1979	2.00	....	
1980	2.21	....	
1981	2.39	....	
Projections: [1]			
1982	2.97	2.60	(0.37)
1983	2.58	2.60	.02
1984	2.67	2.60	(.07)
1985	2.74	2.70	(.04)
1990	3.51	2.90	(.61)
1995	4.47	2.90	(1.57)
2000	5.38	2.90	(2.48)
2005	6.29	2.90	(3.39)
Averages: [1]			
1982-2005	4.34	2.86	(1.48)

[1] Takes into account amounts to be loaned to the social security retirement and survivors (OASI) program under interfund borrowing authority. The loan is not assumed repaid under the II-B economic assumptions. No allowances are included for building or maintaining the trust fund balance.

The near-term financing situation for the hospital insurance program is also severe. In September 1982, the trustees reported that unless Congress acts to increase program revenues or reduce outlays, or some combination thereof, the HI trust fund would begin paying out more than it takes in some time during 1988 and would be depleted during 1991. Estimated operations of the HI trust fund, taking into account the effects of the Tax Equity and Fiscal Responsibility Act of 1982, are as follows: [18]

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[18] Prepared by the Health Care Financing Administration on the basis of the 1982 trustees report II-B assumptions, modified by the Tax Equity and Fiscal Responsibility Act of 1982. Esti-

Continued

Table 9.—ESTIMATED OPERATIONS OF THE HI TRUST FUND, CALENDAR YEARS 1981-91

[Dollars in billions]

Year	Income	Outgo	Net increase in fund	Fund at yearend	Assets[1] (percent)
1981	$35.7	$30.7	$5.0	$18.7	45
1982	32.6	35.6	−3.0	15.8	53
1983	44.0	40.8	3.2	19.0	39
1984	48.4	46.3	2.1	21.0	41
1985	54.5	51.9	2.6	23.6	41
1986	63.2	58.8	4.4	28.0	40
1987	68.5	66.9	1.6	29.7	42
1988	73.8	76.0	−2.3	27.4	39
1989	78.9	86.1	−7.2	20.2	32
1990	83.8	96.8	−13.0	7.2	21
1991	88.5	108.7	−20.2	−13.0	7

[1] Assets at beginning of year as a percentage of outgo during year.

The trustees of the hospital insurance program also reported to Congress that the tax rates currently specified in the law (including the scheduled 1985 and 1986 increases) would be sufficient, along with interest earnings and assets in the HI trust fund, to support program expenditures and make required loans to the social security retirement and survivors programs only for the next 5 to 9 years. The present financing schedule for the expenditures expected over the entire valuation period would not be adequate.

More recent estimates of the near-term financial condition of the HI trust fund provide an even *more pessimistic* picture than that reported in September 1982. Estimates by the Congressional Budget Office (CBO) of the projections of income, outlays, and reserves for hospital insurance indicate that program outlays are already exceeding income, and that the fund could be exhausted during 1987: [19]

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mates assume that the limitations on the rate of increases in reimbursable hospital costs per admission contained in sec. 101 of the Tax Equity and Fiscal Responsibility Act of 1982, scheduled to expire Oct. 1, 1985, would either be extended or replaced by reimbursement provisions of equal financial impact. If such extension or replacement did not occur, the HI trust fund would be depleted some time between 1987 and 1991.

[19] "Prospects for Medicare's Hospital Insurance Trust Fund," Congressional Budget Office; February 1983.

Table 10.—CBO PROJECTIONS OF HI TRUST FUND OUTLAYS, INCOMES AND BALANCES, CALENDAR YEARS 1982-87

[Dollars in billions]

Year	Total outlays	Income [1]	Yearend balance	Yearend balance as percent of next year outlays
1982	$36.0	$25.6	$8.3	
1983	41.1	40.9	8.1	20.2
1984	46.2	44.7	6.7	17.5
1985	51.0	49.4	5.1	13.1
1986	60.0	56.2	1.3	.2
1987	68.5	59.6	−7.6	−9.9

[1] Income in 1982 reflects $12.4 billion borrowed from HI Trust Fund for social security retirement and survivors' benefits.

On March 9, 1983, the House of Representatives passed H.R. 1900, the proposed Social Security Amendments of 1983. Among other things, provisions in that legislation affect both income to and outlays from the hospital insurance program. According to the actuarial estimates accompanying the legislation, the hospital insurance trust fund will be depleted sometime during 1990 using intermediate-range economic assumptions. The estimates assume that the $12.4 billion borrowed from the HI fund in 1982 to help pay social security cash benefits will be repaid during 1986-88.

Table 11.—PROJECTIONS OF HI TRUST FUND INCOME, OUTGO, AND BALANCES, CALENDAR YEARS 1982-90, UNDER H.R. 1900

[Dollars in millions]

Year	Income	Outgo	Net increase in fund	Fund at year end	Assets [1] (percent)
1982	$25.6	$36.2	−$10.6	$8.2	52
1983	44.6	41.1	3.5	11.7	20
1984	45.7	46.8	−1.1	10.6	25
1985	52.2	53.0	−.7	9.8	20
1986	62.7	59.9	2.8	12.6	16
1987	69.6	67.4	2.2	14.8	19
1988	75.2	75.9	−.7	14.1	20
1989	74.4	85.4	−11.0	3.1	17
1990	78.7	95.1	−16.3	−13.2	3

[1] Fund assets (in dollars) at beginning of year as a percentage of estimated dollar outgo during year.

NOTE.—Assumes $2.5 billion repaid to HI trust fund in 1986, $4.5 billion in 1987 and $5.4 billion in 1988.

Source: H. Rept. 98-25, pt. I; Mar. 4, 1983.

(C) Reasons for HI Financing Problems

As noted earlier, to the extent that program costs have exceeded or will exceed increases in taxable payroll, HI tax rates must be increased or benefits reduced in order to adequately finance hospital insurance on a "pay-as-you-go" basis. Since inpatient hospital services account for 95 percent of HI benefit expenditures, the program's financial experience is determined almost entirely by what happens in the hospital sector.

Hospital insurance reimburses institutions for inpatient hospital services on the basis of the share of aggregate inpatient hospital costs allocated to medicare beneficiaries. Trends in program costs can be broadly separated into (1) increases in aggregate expenditures by hospitals in producing covered services, and (2) changes in the share of such expenditures that are borne by the HI program. Increases in aggregate inpatient hospital costs reflect increases in input unit costs, such as higher wages for labor and higher prices for things hospitals buy, changes in the volume of services provided and changes in unit input intensity. Changes in the program's share of aggregate hospital costs result from changes in the proportion of the population covered (including changes due to legislation), changes in the relative number and value of services received by beneficiaries and the effect of various administrative actions on reimbursements and the level of program payments.

Although changes have occurred in the program's share of aggregate hospital costs, the most important cause of the financial problems for hospital insurance has been that aggregate hospital costs for all patients, including medicare patients, have increased substantially faster than increases in average wages and prices in the general economy. In the decade preceding the enactment of medicare (in 1965), hospital costs rose by an annual average 10.4 percent, nearly 7½ percentage points per year higher than increases in the general level of wages and price inflation. During the period 1966–71, hospital cost increases averaged 16 percent per year. Of this amount, wage and price changes only accounted for 5½ percentage points; the remaining 10½ percentage points reflected increases in the volume of services provided and in unit input intensity. Even during the period of economic stabilization controls (1972–74), hospital costs increased at a rate almost 5½ percentage points higher than amounts attributable to increases in average wages and consumer prices. During the post-control period 1975–80, hospital costs rose an average of 15 percent a year, 6 percentage points in excess of increases in unit input costs. Preliminary data for 1981 indicate hospital cost increases about 8 percentage points higher than increases in wages and prices in the general economy:[20]

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[20] 1982 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, table A1.

Table 12.—COMPONENTS OF HISTORICAL INCREASES IN INPATIENT HOSPITAL COSTS AND CHANGES IN CONSUMER PRICES

[In percent]

Calendar year	Unit input costs[1] +	Volume of services +	Unit input intensity =	Aggregate hospital costs	Consumer price index
1956–65	3.0	3.3	4.1	1.4	1.6
1966	4.7	1.6	5.4	11.7	3.0
1967	4.6	.4	13.6	18.6	2.8
1968	5.7	1.1	9.7	16.5	4.2
1969	6.6	3.6	8.2	18.4	5.4
1970	5.7	7.4	7.6	16.8	5.9
1971	4.9	3.0	5.8	13.7	4.3
1972	5.8	2.1	5.6	13.5	3.3
1973	6.8	3.1	.2	10.1	6.2
1974	9.5	3.7	1.3	14.5	11.0
1975	8.2	1.7	8.8	18.7	9.1
1976	7.4	1.6	6.7	15.7	5.8
1977	7.4	.8	5.4	13.6	6.5
1978	8.2	.6	3.9	12.7	7.6
1979	10.2	1.7	.8	12.7	11.1
1980	11.7	2.9	2.0	16.6	13.5

[1] Weighted average of individual wage and price components.

The 1982 trustees report estimates that increases in future aggregate patient hospital costs (using the II–B economic assumptions) will decline from a rate of 18.5 percent for 1981 to about 9.3 percent beginning in the year 2000, and that HI program inpatient costs will decline from 20.1 percent in 1981 to 9.7 percent in the year 2000. Table 11 displays some of the key assumptions behind the one-half trillion dollar HI long-range shortfall discussed earlier.[21]

Table 13.—PROJECTED INCREASES IN AGGREGATE AND HI INPATIENT HOSPITAL COSTS

[In percent]

Calendar year	Aggregate costs +	HI share =	HI costs
1981	18.5	1.6	20.1
1982	16.5	–.6	15.9
1983	16.0	1.0	17.0
1984	15.3	.9	16.2
1985	13.7	1.6	15.3
1990	11.6	1.4	13.0

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[21] *Ibid.* There are indications, however, that the estimates for 1981 may understate the actual experience of the program.

Table 13.—PROJECTED INCREASES IN AGGREGATE AND HI INPATIENT HOSPITAL COSTS—Continued

[In percent]

Calendar year	Aggregate costs	+ HI share	= HI costs
1995	10.0	1.0	11.0
2000	9.3	.4	9.7
2005	9.3	.4	9.7

Repeatedly, cost projections for the hospital insurance program have underestimated both the magnitude and the persistence of high rates of hospital cost increases that might be anticipated. Program actuaries have noted that under conventional economic wisdom, the hospital industry could not be expected to sustain indefinitely such tremendous rates of growth in expenditures, relative to the rest of the economy, experienced during the past two decades. Nevertheless, the industry's growth rate pattern has shown little indication of slowing down.

(D) Options for Raising Program Revenue and/or Reducing Expenditures

As noted above, the hospital insurance portion of the medicare program faces both serious near-term and long-range financing problems. Enactment of the Tax Equity and Fiscal Responsibility Act of 1982 improved the overall financial condition of the HI trust fund by about 25 percent. The previously anticipated date of fund depletion was deferred 2 to 4 years beyond earlier estimates by provisions in that legislation which raised tax income for hospital insurance and reduced program expenditures.

However, unless still further steps are taken to raise additional revenues or reduce future program expenditures, or some combination thereof, the hospital insurance program, on a "pay-as-you-go" basis, will be unable to meet its obligations on behalf of beneficiaries by as early as 1987. Furthermore, if Congress decides to permit additional interfund borrowing of assets from the HI trust fund to help the ailing social security retirement and survivors' cash benefits program, the financial condition of the HI trust fund could become far worse very quickly.[22]

In considering any options for dealing with either the near- or long-term financial crisis in hospital insurance, it is important to keep in mind that much of the program's past and current budget difficulties only reflect many of the problems inherent in the underlying health care economy as a whole. Virtually all programs—public *and* private—that help individuals pay for personal health services have experienced dramatic increases in outlays during the last 15 or so years. Spending for health care has steadily risen at double-digit rates each year and nearly always more rapidly than the growth in the economy overall.

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[22] Borrowings from the HI trust fund $12.4 billion in 1982 to help pay social security retirement and survivors' benefits through July 1983 exceeded, by a significant amount, the original estimates of the medicare funds that would be required for such purposes.

Numerous and complex factors help to determine the level of spending for health benefits, such as those that are covered by the hospital insurance program. The most important of these are: prices, population and changes in the composition of the types, frequency and "intensity" of the services provided to patients. Price inflation clearly has been the most significant of the factors determining the magnitude of the historical increases in spending that have occurred not only in the hospital insurance program, but throughout the health care economy. Estimates about future hospital inflation are also the most important of the factors shaping both the near-term and longer range conditions of both parts of the medicare program.

Nevertheless, spending under hospital insurance and for health benefits generally has also been growing since 1965 in real terms as well, even after adjustments are made for the effects of economywide and medical care price inflation. This is largely the result of changes in the composition of the services provided to patients in recent years. Nowhere are these changes more evident than in the hospital sector. "Real" changes have and are taking place in the nature of the "product" or output produced for patients by hospitals and purchased by programs like medicare. Hospital care is now more labor and capital intensive than ever before, a trend that is likely to continue.

There are some aspects of the hospital insurance program itself, however, that have also contributed to some of the past and present financial problems described in the preceding section of this report. For example, the way in which the program pays institutions for services provided to beneficiaries—namely, on the basis of costs actually incurred by them—has been widely criticized as contributing to higher spending levels of hospital care. Until recently, virtually no limits were imposed on the amounts paid by medicare for such services. There were no incentives for hospitals to constrain spending, since lower spending only meant lower revenues from the Government for medicare patients. Only recently have changes been approved by Congress to impose tighter limits on future payment levels under hospital insurance and to develop incentive payment systems as alternatives to the program's present cost-based reimbursement rules.

Efforts to deal with the financial problems of hospital insurance by increasing future program revenues will not address any programmatic issues or any of the structural problems within the health care system itself that are often mentioned in discussions of rising spending for health care. On the other hand, some of the options for reducing future program expenditures do envision one or more changes in either the present design of medicare or the broader health care system as a whole.

(1) INCREASE PROGRAM REVENUES

There are a variety of ways to increase revenues for the hospital insurance program: [23]

(a) Increase and/or Accelerate HI Tax Rates: One approach would be to increase the hospital insurance tax rate schedule now provided for by law. The actual changes in rates would depend, among other things, upon the period to which such increases would apply, the desired trust fund asset goals at the end of such period and the underlying economic, demographic, and program assumptions used in making the estimates.

For example, as noted earlier in this section (see table 8), over the 25-year valuation period, hospital insurance has an *average* actuarial shortfall of 1.48 percent of taxable payroll, assuming no allowances for the building or maintenance of a trust fund balance at the end of the period and using the II-B economic assumptions contained in the 1982 trustees report. Various graduated rate schedules could be developed to achieve long-range financial balance in the program.

Other near-term changes in HI tax rate schedules can also be devised to meet something other than a long-range resolution of the HI financing issue. For example, the table below shows the rates needed for the years 1983-91 to maintain timely benefit payments and build and maintain a 30-percent HI trust fund reserve ratio by 1987 or a "minimum" trust fund reserve (using the II-B economic assumptions): [24]

Table 14.—HI TAX RATES, 1983-91, UNDER PRESENT LAW, UNDER 30 PERCENT RESERVE BY 1987, OR MINIMUM RESERVE [1]

[In percent]

Calendar year	Present law	30-percent fund ratio by 1987	"Minimum" fund reserve ratio
1983-84	1.30	1.30	1.30
1985	1.35	1.35	1.35
1986	1.45	1.45	1.45
1987	1.45	1.45	1.45
1988	1.45	1.45	1.45
1989	1.45	1.60	1.45
1990	1.45	1.70	1.45
1991	1.45	1.70	1.70

[1] Rates on employee, employer, and self-employed, each.

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[23] The options discussed in this section are not exclusive of each other, nor of other possible combinations with some of the options discussed in the social security sections of this report.

[24] Health Care Financing Administration. (1982 estimate). "Minimum" balances in the HI trust fund are assumed at 5 percent of annual expenditures, the minimum amount necessary for cash flow purposes.

(b) Expand HI Wage Base: Another revenue approach, though not one having nearly the impact of changes in HI tax rates, would involve extending application of the HI tax to all employment in the economy. Unlike most other employers in the United States, State and local governments and nonprofit organizations can choose whether or not to participate in the social security system, including the hospital insurance program. Approximately one out of five U.S. workers are in jobs where such coverage, including the payment of taxes, is optional. More than 3.8 million employees of State and local governments and more than 800,000 employees of nonprofit entities are now exempt from the HI tax.

Many of these employees have also worked long enough (or their spouses have) in employment that is covered by the social security system to become insured for hospital insurance benefits. However, while most workers in covered employment are subject to the tax throughout their entire working careers, State and local government employees and employees of nonprofit organizations not covered by social security may earn the same HI coverage with relatively fewer years of work subject to the HI tax.

In addition to universal coverage and the extension of the HI tax to all employment in the economy, the dollar limits on the earnings that are subject to the tax (known as the wage or earnings base; see table 4) could be eliminated. Cash benefits under social security are wage-related, in that the amount of benefits is linked to the worker's earnings history. However, the amount of benefits paid under the hospital insurance program are related to the costs of hospital and other services received and not in any way to the insured's work history or earnings record.

(c) General Revenue or Other Revenue Sources: From time to time, general revenues or other earmarked sources of revenues have been discussed as a means to finance the medicare program, including hospital insurance. As noted later on in this section, general revenues now finance about three-fourths of the part B, or supplementary medical insurance (SMI), portion of medicare. However, except for sizable general revenue contributions used to finance the benefits of the transitionally uninsured during the first few years of the program reimbursements from general revenues to the hospital insurance program have always constituted a small proportion of program receipts: [25]

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[25] National Commission on Social Security.

Table 15.—REIMBURSEMENT FROM GENERAL REVENUES TO HI FUND

[Dollars in millions]

Calendar year	Military wage credits	Transitionally uninsured	Total	Proportion of HI receipts, exc. interest (percent)
1966	$11	$26	$37	1.9
1967	11	301	312	8.9
1968	22	1,022	1,044	20.0
1969	11	617	628	12.2
1970	11	863	874	15.0
1971	48	503	551	9.9
1972	48	381	429	6.9
1973	48	451	499	4.7
1974	48	471	519	4.5
1975	48	621	669	5.4
1976	141	....	141	1.1
1977	141	803	946	6.3
1978	141	688	[1] 829	4.5
1979	141	734	[1] 875	4.0
1980	141	697	[1] 838	3.4
1981	207	659	[1] 866	2.5

[1] Does not include certain payments for PSRO activities.

Nevertheless, proposals for general revenue financing continue to be suggested. For example, the 1975 Social Security Advisory Council recommended that the overall payroll tax rates scheduled for the cash benefits programs (OASI and DI) and hospital insurance not be changed, that the rates for the cash programs be increased through reallocation of the rates scheduled for HI and that hospital insurance losses be financed from general revenues. The 1979 Advisory Council also recommended infusion of general revenues to hospital insurance by means of earmarking general funds in place of the amounts otherwise earmarked by the HI payroll tax. Among the arguments often used to provide a rationale for general revenue financing of hospital insurance is that, unlike the OASDI programs, HI benefits are not related in any way to an individual's earnings or contributions as are social security cash benefits.

(2) REDUCE PROGRAM EXPENDITURES

From the beginning of the medicare program, various steps have been taken by Congress and by the executive branch to control hospital insurance program expenditures. Such actions have tended to be of three broad types: (1) changes in reimbursement policies or procedures that have reduced the HI program's payments to the providers of HI services on behalf of beneficiaries, (2) changes in patient cost-sharing requirements (deductibles and coinsurance amounts) that directly transfer the financial responsibility for some portion of the costs of services received to those who use services, and (3) changes in the program's benefit design that have shifted the obligation of the hospital insurance program for certain expenses to other sources of payment (e.g., to workers compensation programs, employer-based health insurance plans, auto insurance, etc.).

Reducing future program expenditures might include one or more of the following options: [26]

(a) Shift More Costs to Beneficiaries: As noted earlier in this section, beneficiaries are liable for certain patient cost-sharing amounts with regard to covered inpatient hospital and skilled nursing facility services. The specific amount of the cost-sharing in the HI program is determined by a formula in law and is linked to actual HI program payment experience. There are any number of ways in which to increase the proportion of hospital insurance experience that could be borne by persons who receive covered services, such as increasing the dollar multiplier now used to calculate the deductible, changing the base period against which such calculations are determined, increasing the fractions of the deductible used to determine the daily coinsurance rates, etc.

Another approach is to impose patient cost-sharing requirements where none now apply, such as in the case of home health service visits. Beneficiaries could be charge specific dollar amounts for each home health visit up to some maximum number of visits. Others have proposed to impose daily cost-sharing amounts (often in the form of coinsurance amounts) on the first, 10, 20, etc., days of hospital stay, rather than only toward the end of unusually lengthy episodes as is now the case.

Still another way of shifting program costs to beneficiaries would be to relate the incomes and resources of individuals to program benefit payments. Under present law, hospital insurance benefits are paid to those insured without regard to their incomes or assets, or their ability to pay a greater share of the costs of covered services than now required. The patient cost-sharing requirements under hospital insurance could be revised to establish beneficiary out-of-pocket responsibility for some or all HI services on the basis of an income-related deductible and/or coinsurance amounts, or perhaps on the basis of some limit of overall expenses incurred. For example, beneficiaries could be required to pay some specific percentage of any charges incurred for covered services up to some maximum amount related, in turn, to their ability to pay. Hospital insurance could also treat all or some portion of benefits paid to or on behalf of insured persons as personal income subject to taxation at some level of tax liability.

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[26] As in the case of revenue raising options, none of these approaches to further reducing program expenditures should be considered as exclusive of another. The financial impact of such options naturally depends on the details of specific legislative proposals or administrative actions. Some of the options for reducing program expenditures have already been proposed in various forms from time to time, while others have not.

(b) Reduce the Costs of Covered Services Through Regulation: Under present law, hospital insurance reimburses institutions and certain other suppliers of services on the basis of the costs incurred in the provision of covered services, but only in accordance with rules established by the Government, not the providers of care. Hospital insurance can reduce its liabilities to these providers directly by tightening the rules of payment. In the past, this has been undertaken by revising or changing specific payment principles (e.g., apportionment procedures, definitions of elements of allowable—i.e., reimbursable—cost, etc.), and by establishing overall limits on payment levels to hospitals (e.g., "sec. 223"-type limits and limits on annual rates of increase in payments from medicare). Other types of changes in reimbursement policy of this kind could be devised, while some of the existing policies and practices could be tightened even more. Prospective reimbursement, depending upon its design, may also help to reduce the costs of HI services by changing provider incentives in the direction of containing program costs.

Intensifying utilization review controls, expanding audits and other similar administrative steps might also result in reductions in future outlays for hospital insurance. Precertification and approval requirements might be included in the medicare program to determine when and whether specific services ought to be reimbursable and, if so, under what conditions.

(c) Reduce Expenditures Through Improved Competition: Several proposals have been suggested for enhancing the forces of competition in the health care marketplace as a way to hold down health care costs and, thereby, expenditures for a program like hospital insurance. One of these approaches would enable most persons now covered by HI to purchase health insurance in the private sector using Government-funded health care vouchers. These medicare voucher proposals contain a variety of incentives that are intended to encourage beneficiaries to choose (within limits) from among competing private plans with differing benefits and cost-sharing features as alternatives to the present HI and SMI parts of medicare. Advocates of such proposals believe that such an approach, together with certain other changes to promote greater competition in the health field would moderate increases in health spending for the medicare population. There are also elements in most voucher plans that would have the effect of reducing the Government's overall costs for beneficiaries who opted for the voucher plan.

Another competitive approach to reducing expenditures for the HI program could involve creation of so-called "preferred provider" arrangements under medicare. The Government would enter into agreements with individual or groups of providers to provide covered services at the most competitive rates possible, negotiated in advance. Beneficiaries would not be required to use such preferred providers, but if they received their services from those on the preferred provider list, the deductible and coinsurance amounts now required under the program would be eliminated or reduced.

(d) Other Ways of Reducing Program Expenditures: There are other ways of reducing program expenditures, though most of these approaches generally shift the responsibility for such amounts from the hospital insurance program to others—beneficiaries, other third-parties, other programs, etc. For example, HI provides "service" benefits on behalf of insured persons. That is, medicare covers so many "days" of care or "visits," but reimburses on the basis of the "costs" incurred in the provision of such units. The benefit structure could be redesigned to reimburse on a schedule of maximum dollar amounts per unit of service (indemnity payments) and not on a "costs incurred" basis. A schedule of payments could be established for a prospective period of time and made known to everyone, including beneficiaries and providers. Such an approach would help to fix in advance overall program liability on behalf of insured persons (and focus increased attention on the utilization of services), encourage patients to seek care from providers whose charges were not greater than the allowed schedule of benefits and perhaps encourage providers to consider price in seeking to increase or maintain an adequate patient base.

Changing the current entitlement provisions of hospital insurance can also have considerable impact on program expenditures. For example, Congress recently considered (but did not adopt) provisions to delay the date after which HI coverage first begins, in the case of the aged, by up to a month beyond the month in which they attain age 65. Other age-related changes, such as by raising the age at which entitlement begins, would have even greater expenditure impact.

(3) SUMMARY

The hospital insurance portion of the medicare program faces both serious near- and longer term financial problems. These problems are most apparent when the condition of the program is evaluated, over time, on a self-financing, pay-as-you-go basis. The financing concepts used in hospital insurance, like those used in the social security cash benefits programs, help to focus public and policymaking attention particularly on the longer run problems that will emerge, if additional steps are not taken beforehand to increase program revenues or to curb rising expenditures. These concepts have also contributed to some of the public's expectations about and understanding of the nature of the benefits available under this entitlement program. The view that future HI benefits are somehow "earned" and financed from a worker's own contributions today is still a widespread perception of the HI program, as it is in the case of social security generally.

However, present law could be changed to establish entitlement to hospital insurance without regard to any worker's earnings record or employment history at all. Some other criteria could be used to establish the entitlement to benefits. For example, entitlement to benefits under the companion part of medicare-supplementary medical insurance (SMI)—which helps the same aged and disabled individuals pay for physicians' and other medical services—is not linked to work under the social security system at all (see part III next).

If the basis of entitlement to benefits was the same under both parts of medicare, the public's perspective about the differences in the financing principles used by each program might also change. Unlike HI, the SMI program is financed on a "current cost" basis. This means that Congress *annually* provides adequate financing of SMI benefits and the reserves necessary to meet the obligations and financial soundness requirements of that program without regard to any long-range view of future program experience. Yet, despite the fact that outlays under SMI have grown even faster than HI, rarely does the SMI portion of medicare ever receive the same kind of attention to its financial experience and its future problems as does hospital insurance.

SUPPLEMENTARY MEDICAL INSURANCE (SMI)

(A) Overview

During fiscal year 1984, it is estimated that 29.3 million people will be enrolled in the supplementary medical insurance (SMI), or part B, portion of medicare. Of this number, approximately 20.2 million of the persons protected by the program will receive covered services during the year. During fiscal year 1984, expenditures for supplementary medical insurance benefits will amount to an estimated $20.3 billion.

Table 16.—SUPPLEMENTARY MEDICAL INSURANCE PROGRAM DATA

[In millions of persons]

	Fiscal year	
	1983 (est.)	1984 (est.)
Persons with supplementary medical insurance protection	28.7	29.3
Aged	26.0	26.6
Disabled	2.7	2.7
Persons receiving services	19.5	20.2
Aged	17.7	18.4
Disabled	1.8	1.8

Supplementary medical insurance program outlays

[In billions]

Fiscal year 1982	$14.8
Fiscal year 1983	17.2
Fiscal year 1984	20.3

Unlike the hospital insurance program, where entitlement is generally related to the payment of compulsory taxes on wages, supplementary medical insurance is a voluntary program for eligible individuals who (1) elect to enroll or, (2) in the case of those becoming entitled to hospital insurance after June 1973, and who would otherwise be deemed to have automatically enrolled, have not declined coverage by refusing coverage before it is scheduled to begin.[27] Since the SMI program is distinct and separate from HI, it is possible for an individual to enroll in SMI without being entitled to monthly social security or railroad retirement benefits or to hospital insurance benefits.

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[27] There are provisions in law (known as "buy-in" agreements) under which States may enroll and help finance coverage on behalf of eligible individuals who receive public assistance.

An individual is eligible for enrollment if he or she (1) is entitled to hospital insurance benefits or (2) has attained the age of 65 and is a resident of the United States or an alien lawfully admitted for permanent residence, who has resided in the United States continuously during the 5 years immediately before the month he or she applies for enrollment. Except in the case of enrollment under a Federal-State "buy-in" agreement for certain aged welfare recipients, an individual may enroll in the SMI program, either by positive act or through automatic enrollment, only during an enrollment period. There are two kinds of enrollment periods: (a) the initial enrollment period, which is based on the date when the individual first meets the eligibility requirements for enrollment and (b) the general enrollment period, during which an individual who failed to enroll during his initial enrollment period or whose enrollment has been terminated may enroll or re-enroll. The exact date of SMI coverage depends on when the individual actually enrolls and whether such enrollment is during an initial or a general enrollment period.

During each calendar year, the supplementary medical insurance program pays 80 percent of the "reasonable charges" (or "reasonable costs"), as determined by the program, for covered services in excess of an annual deductible of $75.[28] Beneficiaries are responsible for 20 percent of "reasonable charges" (or "reasonable costs"), known as the coinsurance, and 100 percent, if any, of amounts in excess of such "reasonsable charges."

Covered SMI services include: physicians' services, including surgery, consultations, and home, office, and institutional visits; limited services of dentists, chiropractors and podiatrists; laboratory and other diagnostic tests; X-ray and other radiation therapy; outpatient services at a hospital; rural health clinic services; home dialysis supplies and equipment; artificial devices other than dental; physical and speech therapy; and ambulance services. Also covered are an unlimited number of necessary home health visits (the deductible and coinsurance do not apply to such benefits).

The supplementary medical insurance program is financed from premiums paid by persons who are enrolled in the program and from funds appropriated and transferred from the general fund of the Treasury to the supplementary medical insurance trust fund. The premium rate (currently $12.20 a month) is reviewed annually and revised each July 1. Increases in the premium rate help finance part of the increases in the operating costs of the program. However, in any 1 year, the premium rate may not be increased by a percentage greater than the percentage by which social security benefits were last increased as the result of a general increase in cash benefits (discussed in more detail later on in this report).[29]

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[28] The amount of the annual SMI deductible is specified in law. It was originally $50 a year, increased to $60 a year beginning on Jan. 1, 1973, and to $75 a year beginning on Jan. 1, 1982.

[29] Section 124 of the Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248) temporarily suspends this limitation for two 1-year periods beginning July 1, 1983, and July 1, 1984. Pre-

Continued

The monthly premium amounts charged enrollees since the beginning of the program are shown below:

Table 17.—SMI MONTHLY PREMIUMS FOR AGED AND DISABLED ENROLLEES [1]

Beginning	Monthly premium amount
July 1966	$3.00
April 1968	4.00
July 1970	5.30
July 1971	5.60
July 1972	5.80
July 1973	[2] 6.30
July 1974	6.70
July 1975	6.70
July 1976	7.20
July 1977	7.70
July 1978	8.20
July 1979	8.70
July 1980	9.60
July 1981	11.00
July 1982	12.20
July 1983	13.50

[1] Beginning July 1, 1973, for the disabled.

[2] Monthly premiums for July and August 1973 were reduced to $5.80 and $6.10 respectively, by the Cost of Living Council.

Present law provides for various methods for the collection and payment of monthly SMI premiums. In general, social security and railroad retirement beneficiaries and civil service annuitants—except those enrolled by a State under a Federal-State agreement—have their premiums deducted, when possible, from monthly cash benefit payments. The premiums of persons enrolled under a Federal-State agreement are paid by the State that enrolled them. All others pay premiums by direct remittance.

(B) Financial Experience of the Supplementary Medical Insurance Program

The financing principles employed in connection with the supplementary medical insurance program are altogether different from those used in the hospital insurance program. The SMI program is financed in a manner similar to private group health insurance, essentially as a yearly renewable term insurance plan, intended to be self-financing from premium income paid by enrollees and from the Government's general revenue contributions.[30] Long-range financ-

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miums on those dates will be increased to produce premium revenue for the program equal to 25 percent of SMI program costs for aged enrollees (the disabled will pay the same premium as the elderly).

[30] The Government's contribution may be viewed as similar to that made by employers on behalf of workers and their dependents in private employer-based health benefit plans.

ing standards are not used to measure the actuarial soundness of the SMI plan. Instead, income to the SMI program during any 1-year period for which financing is established need only be adequate to pay for benefits and administrative expenses during that period, even though payment for some covered services will not be made until after the close of the year. The portion of income needed to pay for benefits after the close of the year is added to the SMI trust fund until needed. The amount of assets needed in the trust fund should not be less than the costs of benefits and administration incurred, but not yet paid.

Income to the SMI program (enrollee premium rates and Government contributions) is established in advance of program experience and, as a result, is also subject to projection error. Since income may not cover expenses, trust fund assets are generally set at levels adequate to cover the consequences of moderate projection error, in addition to amounts for expenses incurred but not yet paid. The trustees of the SMI program do not look beyond the period for which the enrollee premium rate and level of general revenue financing have been established to measure the actuarial soundness of the program.

The original medicare law provided that enrollee premium income would equal one-half of the SMI program's benefits and administrative expenses for each year, plus a contingency reserve. The Federal Government appropriated out of general revenues a contribution equal to the premiums paid by the aged to finance the remaining half of the program's costs. The Federal share was not limited to the amount paid by premiums. If the premium estimate was too low, general revenues made up the difference.

The Social Security Amendments of 1972 (P.L. 92-603) and subsequent legislation modified the method by which premiums were to be calculated to limit increases in premium amounts to the percentage by which cash benefits increased in the interval since the premium had been last increased. Under current law, the Secretary of Health and Human Services is required to calculate each December the premium amount for the aged, to be effective the following July. The new premium rate is the lower of: (1) an amount sufficient to cover one-half of the benefits for the aged plus administrative costs and a contingency amount (known as the actuarial rate); or (2) the current premium amount increased by the precentage by which social security cash benefits increase during the period between May of the current year and the following May (known as the standard rate). The premium rate calculated for the aged is also paid by disability beneficiaries, who are under 65, even though they have higher health care costs than the elderly.

The effects of this legislation have been to significantly alter the proportion of financing of the SMI program borne by enrollee premiums which have declined from 50 percent to less than 28 percent of program income.[31]

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[31] Annual Reports of the Board of Trustees of the Supplementary Medical Insurance Trust Fund.

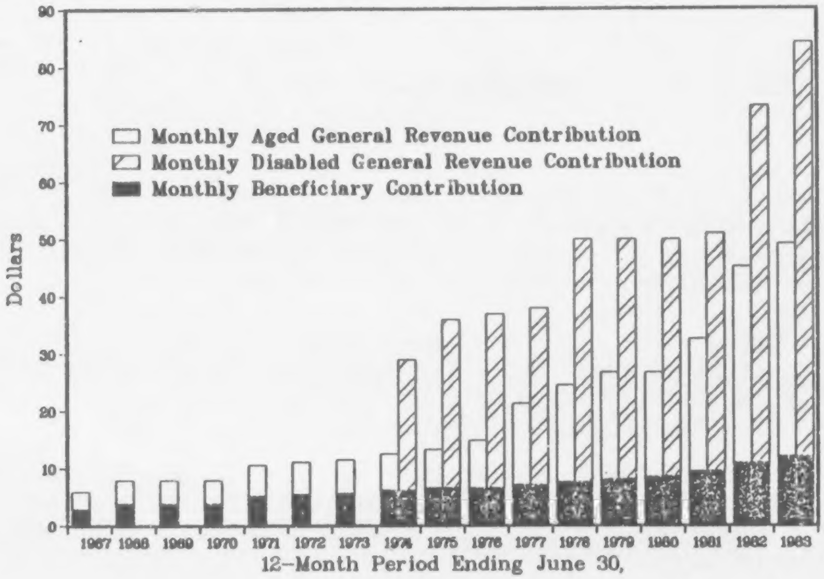
Table 18.—INCOME FROM PREMIUMS, AS PERCENTAGE OF TOTAL SMI INCOME, FISCAL YEARS 1967–81

[Dollars in millions]

	Total income [1]	Premiums from participants					
		Total	(Percent)	Aged	(Percent)	Disabled	(Percent)
1967	$1,270	$647	51	$647	51	(2)	(2)
1968	1,332	698	52	698	52	(2)	(2)
1969	1,886	903	48	903	48	(2)	(2)
1970	1,863	936	50	936	50	(2)	(2)
1971	2,498	1,253	50	1,253	50	(2)	(2)
1972	2,703	1,340	50	1,340	50	(2)	(2)
1973	2,857	1,427	50	1,427	50	(2)	(2)
1974	3,733	1,704	46	1,579	42	$125	3
1975	4,217	1,887	45	1,736	41	151	4
1976	4,888	1,951	40	1,783	36	168	3
T.Q. [3]	1,417	539	38	492	35	46	3
1977	7,228	2,193	30	1,987	27	206	3
1978	8,794	2,431	28	2,186	25	245	3
1979	9,463	2,635	28	2,373	25	263	3
1980	9,851	2,928	30	2,637	27	291	3
1981	12,067	3,320	28	2,988	25	332	3

[1] Less interest income. Numbers may not add due to rounding.
[2] NA.
[3] Transition quarter.

SMI Monthly Per Capita Income



Between 1967–81, total premium payments increased by 413 percent, while income from general revenues rose by 1,304 percent. Total benefit payments have risen almost 589 percent, from $664 million to $12,345 million in 1981. Expressed as a ratio, $3.50 are paid out in benefits for aged SMI beneficiaries for every dollar of premiums paid in by or on behalf of aged enrollees. For the disabled, more than $6 are paid out in benefits for each dollar in premiums paid by disabled enrollees: [32]

Table 19.—SMI BENEFIT PAYMENTS AND RATIO OF BENEFIT PAYMENTS TO PREMIUMS, FISCAL YEARS 1967–81

[Dollars in millions]

	Benefit payments			Ratio of benefit payments to premiums [1]		
	Total	Aged	Disabled	Total	Aged	Disabled
1967	$664	$664	(2)	1.0	1.0	(2)
1968	1,390	1,390	(2)	2.0	2.0	(2)
1969	1,645	1,645	(2)	1.8	1.8	(2)
1970	1,979	1,979	(2)	2.1	2.1	(2)
1971	2,035	2,035	(2)	1.6	1.6	(2)
1972	2,255	2,255	(2)	1.7	1.7	(2)
1973	2,391	2,391	(2)	1.7	1.7	(2)
1974	2,874	2,652	$222	1.7	1.7	1.8
1975	3,765	3,341	424	2.0	1.9	2.8
1976	4,672	4,074	598	2.4	2.3	3.6
T.Q.[3]	1,269	1,083	186	2.4	2.2	4.0
1977	5,867	4,992	875	2.7	2.5	4.2
1978	6,852	5,776	1,076	2.8	2.6	4.4
1979	8,259	6,903	1,356	3.1	2.9	5.2
1980	10,144	8,467	1,677	3.5	3.2	5.8
1981	12,345	10,326	2,019	3.7	3.5	6.1

[1] Ratios are benefit payments from this table divided by premium income, for the aged and the disabled from table 17.

[2] NA.

[3] Transition quarter.

As noted earlier, a provision of the Tax Equity and Fiscal Responsibility Act of 1982 temporarily suspends the limitation on annual increases in the SMI premium to no more than percentage increase in social security cash benefits for two 1-year periods, beginning on July 1, 1983.[33] Under this provision, enrollee premiums will be allowed to increase to amounts necessary to produce premium income equal to 25 percent of SMI program costs for elderly enrollees. The limitation will again apply with respect to periods beginning July 1, 1985, and thereafter.

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[32] *Ibid.*

[33] See footnote 31.

Standards of solvency for the SMI program require that assets be sufficient to cover program liabilities at the end of the financing period. Because the actuarial rates are established prospectively, they are subject to projection error. From a historical standpoint, program actuaries have made both underestimates and overestimates of SMI program costs. This may be illustrated by comparing total assets with total liabilities for benefits and administrative costs incurred but unpaid on June 30 of each year. For most years, assets have not been as large as outstanding liabilities, though the balance of the trust fund has remained positive, permitting claims to be paid.[34]

Table 20.—ESTIMATED ASSETS AND LIABILITIES OF SMI TRUST FUND, 1967–81

[Dollars in millions]

12-month period ending June 30	Fund balance	Total assets	Total liabilities	Excess of assets over liabilities	Ratio[1]
1967	$486	$510	$499	$11	0.01
1968	307	395	557	−162	−.08
1969	378	385	692	−307	−.14
1970	57	72	638	−566	−.24
1971	290	312	700	−388	−.15
1972	481	478	738	−260	−.09
1973	746	739	857	−118	−.03
1974	1,272	1,267	1,175	92	.02
1975	1,424	1,491	1,374	117	.02
1976	1,219	1,324	1,568	−244	−.04
1977	2,170	2,261	1,923	338	.04
1978	3,786	3,826	2,209	1,384	.16
1979	4,880	4,882	2,861	2,021	.19
1980	4,657	4,657	3,478	1,179	.09
1981	3,801	3,801	4,002	−201	−.01

[1] Ratio of assets over liabilities to next year's total incurred expenditures.

In recent years, program actuaries have become increasingly more accurate in making projections of premium income, Government contributions and benefit payments. With better accuracy, program actuaries have been able to reduce the size of contingency margins in the estimates of probable SMI experience, in order to avoid unneeded buildup of large balances in the SMI trust fund.

(C) Discussion of SMI Financing Experience

Unlike the hospital insurance program, there has been little discussion of problems with financing supplementary medical insurance. This is probably due, in part, because the SMI program is refinanced annually, rather than on a long-term basis. Growth in program expenditures is almost simultaneously accommodated by increases in premium rates and by larger amounts of general revenues. No attempt is made to estimate any longer range forecasts of future outlays or the amount of premiums or general funds needed to meet program obligations 5, 10, or 25 years hence, as is done for the hospital insurance program.

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[34] 1982 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund.

The sources of financing of each of the respective parts of medicare also probably play some role in determining attitudes about each program's financial condition. Explanations of future shortfalls in the hospital insurance program are expressed as percentages of taxable payroll which also represent a highly visible indication of the average amount of additional payroll taxes that would be needed to restore actuarial balance to the HI program. These are direct taxes on employment, increasingly resisted by and unpopular with, both workers and employers. The financing of supplementary medical insurance, on the other hand, has less public visibility and directly affects fewer individual voters. Premium increases are visible to SMI enrollees, but they are far less numerous than the numbers of workers in the country as a whole. More importantly, three-fourths of the income to the SMI program comes from the general funds of the Treasury without the earmarking high profile of hospital insurance payroll taxes. Tables 17 and 18 also illustrate that even SMI enrollees themselves have been shielded from much of the increases in SMI program growth because of the provision that limits any premium increases to rates of increase in social security cash benefits.

Nevertheless, the SMI program has grown substantially since its inception more than 15 years ago. In fact, while benefits under the hospital insurance program increased by 1,053 percent between fiscal years 1967–81, benefits under the supplementary medical insurance program rose by nearly 1,800 percent during the same period.[35] In contrast, the Federal budget during this period rose by 317 percent. Adjusted for inflation, HI benefits between 1967–81 increased by about 327 percent, while SMI benefits rose by 589 percent.[36]

Some of the dramatic growth in SMI benefits has been due to increased numbers of older persons enrolled in the program and some the result of including the disabled and individuals with end-stage renal disease on the rolls. SMI benefits for the disabled, in particular, have shown substantial growth, increasing nearly tenfold between fiscal years 1974–81. Benefits on behalf of persons with end-stage renal disease, whose costs are both higher and different from most other disabled persons, have also accounted for a share of SMI expenditures far greater than their proportional representation in the enrolled SMI population.[37]

Factors that have contributed significantly to rising expenditures under SMI include: (1) increases in physician fees, as constrained by the program's "reasonable charge" reimbursement policies; (2) more physician visits per enrollee, including increased use of specialists; (3) increases in the use of more expensive services; (4) increases in outpatient hospital costs; and (5) increases in other SMI covered service costs, such as laboratory services, etc. It is also important to note that program reimbursements have tended to rise faster than increases in "reasonable charges" (or reasonable costs) under the SMI program, because the calendar year deductible used in the program is "static" or fixed, and thereby covers an even smaller percentage of such charges with each passing year.

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[35] 1982 Annual Reports of the Trustees of the Hospital Insurance and Supplementary Medical Insurance Trust Funds.

[36] Percentages change using constant 1967 dollars.

[37] Data provided by the Health Care Financing Administration in 1981 indicated that nearly 10 percent of all SMI benefits paid during calendar year 1980 were on behalf of ESRD beneficiaries.

Table 21 shows the historical increases in recognized charges per enrollee for physician services (which account for about three-fourths of all costs per enrollee) from the inception of the program through June 30, 1980, in contrast to increases in the physician fee component of the Consumer Price Index which provides an estimate of the historical increases in average charge per service.[38]

Table 21.—INCREASES IN SMI RECOGNIZED CHARGES PER ENROLLEE AND IN THE PHYSICIAN FEE COMPONENT OF THE CPI, 1967–80

[In percent]

Year ending June 30—	Total increase in recognized SMI charges per enrollee	Increase in physician fee component of CPI
Aged:		
1967		7.6
1968	13.3	5.9
1969	7.6	6.2
1970	4.0	6.7
1971	5.0	7.5
1972	6.6	5.2
1973	7.2	2.6
1974	8.9	5.0
1975	12.7	12.8
1976	11.5	11.4
1977	12.7	10.2
1978	13.6	8.9
1979	11.9	8.6
1980	16.6	11.5
Disabled (excluding ESRD):		
1974		5.0
1975	25.4	12.8
1976	15.3	11.4

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[38] 1982 Annual Report of the Trustees of the Federal Supplementary Medical Insurance Trust Fund. Recognized charges per enrollee include estimates of the effects of all of the factors described in the preceding paragraph.

Table 21.—INCREASES IN SMI RECOGNIZED CHARGES PER ENROLLEE AND IN THE PHYSICIAN FEE COMPONENT OF THE CPI, 1967–80—Continued

[In percent]

Year ending June 30—	Total increase in recognized SMI charges per enrollee	Increase in physician fee component of CPI
1977	15.1	10.2
1978	15.7	8.9
1979	17.1	8.6
1980	18.9	11.5

Program actuaries expect that total increases in recognized charges per enrollee for physician services under SMI will continue at significant double-digit rates of increase during the next several years.

The projected 1983–84 actuarial status of the SMI trust fund is made on the basis of three different sets of assumptions—high, low, and intermediate. The high and low alternatives reflect growth rates for the various components of program costs which are more favorable or more adverse, respectively, than those of the intermediate projection. The intermediate projection is considered reasonable in light of the nature and historical experience of the program. Included in the projection factors are assumptions about rates of change in physicians' fees, the utilization of physicians' services and outpatient services per enrollee.[39]

Table 22.—PROJECTION FACTORS, SMI PROGRAM, FOR 12-MONTH PERIODS ENDING JUNE 30, 1983 AND 1984

[In percent]

	Low cost		High cost		Intermediate cost	
	1983	1984	1983	1984	1983	1984
Projection factors:						
Physician services, fees:						
Aged	9.1	6.9	10.1	7.9	9.6	7.4
Disabled	9.1	6.9	10.1	7.9	9.6	7.4
Physician services, residual: [1]						
Aged	5.4	4.3	9.4	8.3	7.4	6.3
Disabled	6.1	4.4	16.1	14.4	11.1	9.4

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[39] *Federal Register*, vol 47, No. 251; Dec. 30, 1982, pp. 58366–69.

Table 22.—PROJECTION FACTORS, SMI PROGRAM, FOR 12-MONTH PERIODS ENDING JUNE 30, 1983 AND 1984—Continued

[In percent]

	Low cost		High cost		Intermediate cost	
	1983	1984	1983	1984	1983	1984
Outpatient hospital services per enrollee:						
Aged	7.9	3.7	21.9	14.9	14.9	13.7
Disabled	20.3	14.9	40.3	34.9	30.3	24.9

[1] Increase in number of services received and greater relative use of more expensive services.

The actuarial status of the SMI trust fund using each of these projections is shown in table 21.[40]

Table 23.—ACTUARIAL STATUS OF SMI TRUST FUND FOR 12-MONTH PERIODS ENDING JUNE 30, 1983 and 1984

[Dollars in millions]

	Low cost		High cost		Intermediate cost	
	1983	1984	1983	1984	1983	1984
Asset	$7,430	$9,234	$6,029	$4,800	$6,736	$7,042
Liabilities	4,321	4,808	5,027	5,857	4,670	5,319
Assets less liabilities	3,109	4,426	1,002	−1,057	2,066	1,723
Ratio of assets less liabilities to expenditures (percent)	15.9	20.0	4.4	−3.8	9.8	7.0

(D) Options for Raising SMI Revenue and/or Reducing Expenditures

Because it is financed on a current basis, the supplementary medical insurance program is not usually thought of as having serious financing problems like hospital insurance. Nevertheless, spending for SMI benefits has grown even faster than spending for hospital insurance benefits, and most of SMI's financing now comes directly from the Treasury of the United States.

From time to time, Congress has enacted legislation that has affected SMI expenditures. Some of these changes, such as the addition of the disabled and the renal populations, have increased program outlays in a significant way. Other changes have had the effect of reducing benefit levels, either directly by increasing the beneficiary's share of the costs of covered services (e.g., increases in the annual deductible amount) or indirectly by reducing the program's liability for covered expenses (e.g., changes in reimbursement policies, such as the tightening of the concept of "reasonable charges").

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[40] *Ibid.*

Only infrequently has Congress enacted legislation making changes in the revenue side of the SMI program. The most important of these changes reduced the amount of the program's revenues that can come from premiums paid by enrollees by limiting annual increases in premiums to percentages no greater than increases in social security cash benefits. Congress also limited the amount of premiums paid by the disabled and those with end-stage renal disease to the rates established for the elderly, even though the former consume a disproportionate amount of program benefits.

Except for a temporary suspension of the limitation on annual rates of increase in the premium payment, congressional actions affecting the SMI program during the 97th Congress reduced program expenditures.

(1) INCREASE PROGRAM REVENUES

There are various ways to increase revenues for the SMI program. For example, one way would involve gradually increasing the percentage of program costs financed by enrollees through premiums until premium income again accounted for 50 percent of such expenditures. Different combinations of scheduled increases could be devised for this purpose. A related approach might involve fixing permanently (rather than temporarily, as provided for in the Tax Equity and Fiscal Responsibility Act of 1982) the share of program costs that are to be borne by SMI enrollees through premium charges (e.g., 25, 30, 35 percent, etc.).

Another way of increasing program revenue would relate premiums charged to the ability of enrollees to pay. Under such an approach, for example, premium levels would be increased to finance half of expected program costs. Individuals at or below some specified income and/or asset level, however, would not be required to pay the full premium amount, but rather some fraction thereof, depending upon their resources. A variant of this would require all enrollees to pay the higher premium amounts, but lower income persons could receive a refundable tax credit for amounts in excess of that determined under some income-related schedule of premium liability.

Still other sources of revenue might include earmarked excise taxes on certain items, the uses of which are sometimes associated with certain health problems. Taxes on cigarettes and alcohol are sometimes discussed in this context. Another alternative would involve combining the hospital insurance and the supplementary medical insurance parts of medicare into a single program financed from a medicare payroll tax, eliminating altogether the use of general revenues and/or enrollee premiums as the sources of SMI financing.

(2) REDUCE PROGRAM EXPENDITURES

As in the case of hospital insurance, Congress and the executive branch have taken various steps over the years to control program expenditures under supplementary medical insurance. There have been significant changes in reimbursement policies which have had the effect of limiting the SMI program's payments for covered services, particularly for physician services. The amount of patient cost-sharing, in the form of changes in the annual deductible, has been increased on two occasions. Reducing or slowing the future rate of increase in SMI program might include one or more of the following options:

(a) Shift More Costs to Beneficiaries: As noted earlier, beneficiaries are liable for certain patient cost-sharing requirements under the supplementary medical insurance portion of medicare, specifically an annual deductible and a coinsurance rate. There are any number of ways in which to increase the proportion of SMI program costs that could be borne by SMI beneficiaries.

For example, currently the annual deductible is a fixed dollar amount specified by law. Because the amount of this deductible does not increase each year in step with increases in covered SMI program expenses, the proportion of expenses, in real terms, borne by the beneficiary vis-a-vis the program decreases each year. The dollar amount of the annual deductible could be made "dynamic"—i.e., be adjusted every year in order to preserve the relative liabilities of patients and the program for their respective shares of covered expenses. Such adjustments could be made to reflect actual changes in the costs of SMI, increases in medical care costs generally, or be adjusted by some other indicator. Last year, for example, Congress considered, but did not adopt, a proposal to index the deductible by rates of change in the Consumer Price Index.

Other ways of shifting more costs to beneficiaries could include new patient cost-sharing charges for certain covered services. For example, copayment amounts might be levied for certain types of covered SMI services apart from or in addition to existing deductible and coinsurance amounts. These could entail fixed dollar charges per visit or session to one or all of the practitioner categories the services of which are covered by the program. The coinsurance rates for all or some covered services likewise could be increased from the present 20-percent rate applicable to most SMI services.

(b) Reduce Costs of Covered Services Through Regulation: The program could reduce its liabilities for future benefits by expanding and changing the law and regulations that define how payments are now made under supplementary medical insurance. For example, payments for physician and most other covered SMI services are made on the basis of "reasonable charges" which are intended to take into account the fees actually charged by practitioners and other suppliers in the locale where the services are rendered. Though Congress in the past has imposed limits on the charges that are considered "reasonable" for reimbursement purposes, increases in these amounts are still influenced, in large

measure, by the collective pricing decisions of hundreds of thousands of practitioners who provide services to beneficiaries. These current reimbursement rules for SMI services could be changed to pay benefits on some other basis than fee-for-service—e.g., fixed fee schedules updated from time to time by the Government. Such amounts would be paid without regard to any of the pricing practices of physicians and others for specific services. Patients and physicians would be informed of such amounts and would know, in advance, the limits of the SMI program's liability for covered care.

(c) Reduce the Costs of Covered Services Through Competition: Many of the proposals described in the section on ways to reduce HI program expenditures through improved competition—e.g., use of vouchers, preferred provider agreements, etc.—could apply to the SMI program as well. The intent of such proposals is to slow rates of increase in SMI program expenditures by offering practitioners and enrollees incentives to moderate both the prices and volume of services rendered to program beneficiaries.

(3) SUMMARY

Problems with financing supplementary medical insurance have not received quite the same kind of attention as those associated with the hospital insurance portion of medicare. As suggested earlier, this is probably due, in part, to the fact that SMI is "currently financed." Congress and the public need only examine 1 or 2 years of recent program experience in order to deal with most financing questions relating to SMI. The sources of SMI financing, too—general revenues and premiums from enrollees—may also contribute to a myopic view of the program's overall rate of growth and future impact on the budget. The growing importance to the program of general revenues, in particular, suggests that it may be worthwhile for the Congress to consider some means for examining the supplementary medical insurance part of medicare over a term longer than is now required by the current provisions of law relating to the annual promulgation of premium rates and residual financing of the balance from the Treasury.

Chapter V

Civil Service Retirement Financing

by

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16-535 0 - 83 - 19

Acknowledgment

This paper, as well as the one on Railroad Retirement, benefited from the patience and skill of Brenda Freeman, who contributed many nights and weekends to their production.

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CIVIL SERVICE RETIREMENT FINANCING

HISTORY AND PROVISIONS OF CIVIL SERVICE RETIREMENT

(A) Introduction

The establishment of a protected civil service rests on the belief that it is better to entrust most Government operations to a professional civil service than to a changing corps of employees chosen by winners of the last election and on the belief that procedures can be developed to minimize the number of mistaken appointments. A professional civil service provides an ongoing class of employees who are experienced in the operations of Government and immune from passing political "housecleaning." The balance between the employees' interests in a secure public position and the public's interest in a staff of competent workers is achieved through the appointment and tenure process: employees win appointments from a pool of qualified applicants, and after a trial (probationary) period they may not be dismissed without a vigorous proof of incompetence, insubordination, incapacity, or misconduct. Thereafter, their jobs are fairly unbothered professionally by the fortunes of this election or that party.

Once the concept of a professional civil service was enacted, only a generation would pass before the need to establish retirement and disability provisions made itself evident: without adequate retirement provisions for individuals no longer capable of doing their jobs, aged or disabled workers would simply retain their jobs. A central feature of civil service tenure is that individuals may be removed for declining ability only with great difficulty. The standard cause for removal is active misbehavior, such as theft, unauthorized absence, insubordination, drunk on duty.

(B) History of Civil Service Retirement [1]

The civil service retirement system (CSRS) was established in 1920 because of the need for an efficient and humane method to remove from duty tenured employees whose age or infirmity prevented them from doing satisfactory work. CSRS is an early product of the scientific management movement in Government, which held that the goals of effective and economical administration were best served by encouraging the retention of experienced employees, promoting the clearly competent, and removing from the rolls employees whose productivity was diminishing because of deteriorating ability.

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[1] For a more comprehensive history of CSRS see Paul P. Van Riper, "History of the United States Civil Service," White Plains, New York: Row, Peterson and Co., 1958, esp. pp. 162-163, 197, 246, 276-277, 296, and 520-521.

See also Geniana R. Edwards, "Organized Federal Workers: A Study of Three Representative Unions" (unpublished Master's thesis, Department of Economics, George Washington University, 1939), pp. 15-26, Lynn Waldorf, "History of the Civil Service Retirement System 1920-1970" (United States Civil Service Commission, April 1971), passim, and report by the Comptroller General of the United States. Need for overall policy and coordinated management of Federal retirement systems, vol. 1, Dec. 29, 1978, p. 38. U.S. Congress. Senate. Appendix to the Report by the Cabinet Committee on Federal Staff Retirement Systems. March 7, 1966. The history recounted in the next few pages is drawn from the above cited works.

The primary objective of the original retirement program was to improve public management by filling Federal jobs with persons fully capable of carrying out their duties. Although some concern existed for the retirement income of individuals who had devoted much of their lives to Government service, the retirement system was defended as a means for improving the work force. The CSRS began in a coincidence of interests uniting management, labor, and the public. Over time, the somewhat different goals and values of these groups have conflicted. Thus, most changes in CSRS have required compromise to balance and accommodate divergent interests.

(1) The Origins of CSRS

The Pendleton Act of 1883 inaugurated the modern Federal civil service. The act sought to provide equal opportunity and highly qualified employees by basing the new classified appointments to Federal service on open and competitive examinations. It sought to provide continuity and political neutrality in Federal service by providing classified employees more security than was the custom in previous Government employment or in the private sector. The Pendleton Act, however, did not provide for a retirement system and this omission caused problems.

The Pendleton Act ignored retirement because at that time people neither expected nor prepared to retire. Retirement systems were rare and small; most people worked all their lives to support themselves and their families. Under these circumstances, many people considered it unfair to fire employees whose only failing was old age. Thus, the removal of longtime civil servants usually attracted considerable and hostile public reaction, and this meant civil servants were seldom dismissed from their jobs.

An unofficial and unauthorized public pension plan emerged. Employees were retired on the job: oldtimers were carried on staffs and paid full salaries for little or no work. This de facto practice impaired Government operations; it blocked the flow of appointments and promotions required to recruit and retain employees who were able to do the job; it cost too much money.

Meanwhile, the Federal civil service was growing rapidly. In 1883, there were 131,000 civil servants; in 1918, there were 917,000 civil servants. Little or no turnover among employees accounted for some of this growth. Starting around the turn of the century, and continuing for 20 years, pressure from Federal employees, their representatives, and other political leaders resulted finally in passage of the Civil Service Retirement Act. Backers won the support of President Woodrow Wilson and, over opposition of conservative southern Senators and Congressmen, legislation sponsored by Senator Thomas Sterling and Congressman Frederick R. Lehlbach, Chairmen of the Congressional Civil Service Committees, was enacted in 1920.

(2) THE CIVIL SERVICE RETIREMENT ACT OF 1920

The original act generally limited its coverage to permanent competitive employees in the executive branch of the Federal Government and to regular employees of the District of Columbia Government. During the first year after passage, approximately 330,000 employees were covered under CSRS.

Three automatic retirement ages were established—62, 65, and 70. The type of position in which one was employed determined his retirement age. Generally, retirement became mandatory at the age prescribed, regardless of length of service. Employees dismissed before retirement age could not receive annuity payments unless they had served 15 years or more. Employees with at least 15 years of service could retire if they became totally disabled for useful and efficient service in their position or some other position to which they could have been assigned. (The disabling condition could not be due to "vicious habits, intemperance, or willful misconduct" on the part of the employee.)

The amount of retirement annuity was based upon two factors: (1) the average of an employee's annual basic salary for the last 10 years and (2) his length of service up to 30 years. If the calculation resulted in an annuity below a prescribed minimum dollar amount, the employee was eligible for a minimum of $180 a year. If it exceeded a prescribed maximum dollar amount, the annuity was limited to $720 a year.

The original act required that a regular deduction of 2.5 percent from each covered employee's basic salary be credited to the CSRS fund. The Secretary of the Interior, charged with administering the system, was directed to submit to the Secretary of the Treasury annual estimates of appropriations that were necessary to continue the system in full force. The Secretary of the Treasury was authorized to invest in interest-bearing securities of the United States any CSRS trust fund money not immediately needed for pensions. The interest from such investments reverted to the fund.

(3) THE EVOLUTION OF CSRS OBJECTIVES

The original act contained no provisions for optional retirement, no survivor benefits, and no protections for employees who were involuntarily separated through no fault of their own. As a result of system immaturity, strict eligibility requirements, and the small size of pensions, employee contributions more than covered the demands on CSRS funds during the first decade of the plan. The Government, in fact, did not contribute any money at all to the CSRS fund until 1928.

In many of its features, the original statute assigned primary importance to the discretion of supervisors. The law, for example, provided for only two types of retirement, mandatory and disability. Mandatory retirement was at age 70 unless continuance in service was authorized by the employee's supervisor. This provision applied to all workers, even those who lacked sufficient length of service to qualify for an annuity. The original act also established the principle that an application for disability retirement could be initiated either by the employee or the employer. An employee's application for disability retirement required the cooperation of supervisors; an employer's application did not need the consent of the employee. While the original act promised and produced some improvements in Government services, there can be little doubt that the initial objectives of CSRS were to keep costs down and to assist Federal management at minimal cost.

The initial objectives of CSRS, however, were soon affected by changing economic conditions and new Government policies. The Great Depression exposed the vulnerability of all workers to uncontrollable forces, and the New Deal created Federal programs to promote economic security for workers and their families. A series of events in the 1940's, in particular, made pension benefits a more prominent part of employee compensation.

In 1942 the Internal Revenue Service (IRS) ruled that private employer contributions to qualified private pension plans could be deducted from gross income as an ordinary business expense. Government-imposed wage controls during World War II prompted employers to offer pension benefits as a means to attract and retain workers. In 1948 the National Labor Relations Board (NLRB) ruled that employers have a legal obligation to bargain in good faith over the terms of pension plans. Thus, employers began to offer roughly equivalent benefit packages as a standard industrial relations practice.

These developments stimulated improvements in CSRS. Mandatory retirement rules were relaxed, disability provisions were liberalized, optional retirement, survivor benefits, and protections for involuntarily separated workers were added. Coverage was expanded from 331,000 workers in 1920 to over 3 million workers in 1942. These changes, designed to maintain morale and facilitate mobility among Federal workers, were expected to improve Government operations.

These reforms mark the emergence of a second generation of CSRS objectives: the protection of employees had become a primary concern of the system. The concept of retirement benefits as payments granted primarily to achieve management objectives, for example, was slowly evolved to include the concept of retirement as an indirect or deferred part of total compensation. Retirement benefits became a "right" earned through past services and contributions; workers became entitled to an income sufficient to live in some comfort and dignity upon completion of a full career. The goals of employees, backed by the growth of Federal unions, achieved approximate parity with the goals of supervisors.

The objectives of CSRS began to have expanded significance. Supporters of a more active social role for CSRS argued that the personnel practices of the Government should set an example and a standard for other employers. This third generation of public objectives is reflected in changes in the treatment of various classes of beneficiaries, i.e., survivors, dependents, and disabled retirees. A program that began as a device for improving the efficiency of Government, and with a secondary objective of providing for the security of long-term employees, was now perceived by many as having the additional responsibility of setting an example of refined and comprehensive employee income protection.

Table 1.—MAJOR CHANGES TO CIVIL SERVICE RETIREMENT BENEFIT ELIGIBILITY AND COMPENSATION

Date	Age-service requirements to receive annuity					General formula	Survivor benefit election
	Optional	Disability	Involuntary	Deferred	Mandatory		
1920	No provision.	Any-15	No provision.	No provision.	70-15	30 to 60 percent of average 10 yr salary by schedule	No provision.
1930	68-30	Any-5	55-15 (1922 Act).	No provision.	Same	$30 x service + amount purchaseable from contributions x average salary for 5 yr, various maximums and minimums.	No provision.
1942	62-15 60-30 55-30	Same	62-5 55-5	Vested Any-5 Payable at 62-5.	Same	Same, + minimum of 1/70 x average salary for 5 yr x service (maximum 35 yr).	Election by retiree (1939 law).
1948	Same	Same	Any-25	Same	Same	1½ percent x average salary for 5 yr x service or (1 percent x salary + $25) x service. Maximum 80 percent of salary.	Widow and children.
1956	62-5 60-30 55-30	Same	Any-25 50-20	Same	Same	Same	Same.
1969	62-5 60-20 55-30 (1966 Act).	Same	Same	Same	None after Sept. 30, 1978.	Same, except x average salary for 3 yr	Same.

Source: Office of Personnel Management. Federal Fringe Benefit Facts, 1981.

(4) CURTAILMENT OF CSRS COSTS

In recent years, two costly developments have forced a series of changes to CSRS in an attempt to reduce its expense. First, the maturity of the system has swelled its costs by changing the ratio of payors to payees; second, the slowdown in economic growth has contributed to the growing Federal deficit. As the size of the Federal Government came under increasing criticism, so did Federal employees. After years of steady improvement to CSRS, Congress began to scale back the rapidly increasing costs of the program.

Generally, the cutbacks in CSRS were made in cost-of-living adjustments (COLA), the program's most costly provision. However, other changes have been made to reduce the number of people entering the rolls, and to reduce the size of benefits granted at entitlement.

The CSRS benefit costs have attracted considerable criticism because of the growing understanding that four-fifths of the costs are paid by general revenues. In addition, CSRS benefits appear generous in comparison with prevailing non-Federal pension practices. Furthermore, attention to CSRS costs has been prompted by debates about social security financing needs; because CSRS participants are not covered by social security, but most Federal retirees, under other employment, will be able to qualify for benefits from social security under provisions of that program intended for low-income or short-service workers—provisions not intended for workers who also qualify for pensions from noncovered employment.

(C) Basic Benefit Structure of CSRS

The present system bears little resemblance to that established by the original legislation. The major provisions of the current plan are summarized in table 2. Key provisions are more fully described in the following text.

Table 2.—PROVISIONS OF THE CURRENT CSRS

Mandatory contributions	7 percent of employee salary.
Vesting	Employee eligible for retirement benefit payable at age 62 after 5 years of civilian service. If employee contributions are withdrawn, vesting is forfeited.
Retirement benefit formula	High-3 year average salary multiplied by the sum of: 1.5 percent times first 5 years of service, 1.75 percent times second 5 years of service, and 2 percent times all years of service over 10. Maximum benefit is 80 percent of high-3.
Optional retirement	Unreduced benefit payable at: age 55 with 30 years of service, age 60 with 20 years of service, or age 62 with 5 years of service.

Table 2.—PROVISIONS OF THE CURRENT CSRS—Continued

Involuntary retirement	Benefit payable at age 50 with 20 years of service or at any age with 25 years of service. Benefit reduced by one-sixth of 1 percent for each month under age 55.
Disability	Employee eligibile for benefit if disease or injury prevents performance of job. Must have 5 years of service. The annuity is the benefit earned at disability, or if larger, the lesser of (a) 40 percent of high-3 pay or (b) the annity that would have been paid if the employee had continued working until age 60 at the same high-3 pay.
Preretirement survivors' benefit	Coverage begins after 18 months of service. Spouse receives 55 percent of benefit computed the same as for disability. Children's benefit is unrelated to annuity payment; formula varies based on whether orphaned or not.
Postretirement survivors' benefit	If joint survivor coverage is chosen by employee, surviving spouse receives 55 percent of the earned annuity. Children's benefit is the same as preretirement coverage. An unmarried annuitant may also select survivor protection for person with insurable interest, who would receive 55 percent of reduced annuity (adjusted for age difference).
COLA	Retiree and survivor annuities are adjusted to reflect full annual increase in the Consumer Price Index (CPI) as of December of the preceding year. Beginning in 1983, for three years: COLA will be applied on a 13-month schedule (April 1983, May 1984, June 1985); nondisability retirees under age 62 each March 1 will receive one-half of projected COLA; such retirees would receive 3.3 percent, 3.6 percent, 3.3 percent for each of the 3 years, respectively.

(1) VESTING

Generally, any employee with 5 years of civilian Federal service is a vested member of the system, that is, eligible to receive benefits upon retirement. Vested participants who leave CSRS employment receive either a refund equal to their CSRS contributions (without interest) or a deferred retirement annuity payable when the participant reaches age 62. Participants who are not vested and leave CSRS employment are eligible to receive only refunds of their contributions plus interest.

The original 1920 law required a participant to complete 15 years of service for a retirement benefit. This standard continued until 1942, when the current 5-year vesting provision was established. This liberalization of vesting requirements was intended as a practical solution to the problem of lack of coordination with the social security system. Before this change, if an employee left Federal service after, for example, 10 years, the employee would receive no credit under any retirement system for the 10 years of Federal service unless the individual were reemployed at a later date and paid back the refunded contributions.

Almost all private sector employees, however, are covered under the social security system, the protection and benefits of which follow employees from job to job in the private sector. These workers have portable pensions, unlike Federal workers without social security coverage. Over half of all Federal workers enter and leave Federal service without securing any credit toward CSRS benefits.

Unlike social security, a program in which benefits are based upon wages that have been "indexed" to reflect economic changes over an employee's lifetime, CSRS benefits are not indexed but based upon the employee's actual wages at the time separation occurred. Thus, deferred benefits lose considerable value if many years pass between separation and retirement. Because of that diminishing value to deferred retirement benefits, 11 out of 12 separating employees choose refunds rather than deferred benefits.

(2) BENEFIT FORMULA

Under the general formula, a percentage of average salary during the highest 3 consecutive years of earnings (high-3) is multiplied by years of service as follows: 1.5 percent times the first 5 years of service, 1.75 percent times the next 5 years of service, and 2 percent times any remaining years. The results are then added to obtain the basic annual annuity.

The maximum benefit is 80 percent of the retiree's high-3 average annual pay; this limit is reached with 41 years and 11 months of service. Additional annuity attributable to credit allowed for unused sick leave is permitted over and above this limitation. The minimum benefit cannot be less than the smallest social security primary insurance amount. This minimum is applied only if the annuitant is not entitled to any other periodic payment from the Government that equals or exceeds the smallest primary insurance amount which is then in effect.

The percentage component of the benefit formula was adopted in 1956 as a means of liberalizing the existing formula (1.5 percent of final average salary (high-5) for each year of service). The percentages in the formula were a compromise between the House, which proposed that 1.75 percent be applied for all years of service, and the Senate, which proposed to retain the 1.5 percent for the first 5 years with 2 percent applied to all other years. The compromise formula substantially favors older workers with long careers.

The legislative history suggests that final result was not necessarily intended to favor long-term workers, but represented a compromise between House and Senate versions. Those in favor of the formula saw it as a method of liberalizing the benefit. Federal unions had strongly argued that benefits had not kept pace with private industry and that benefits were inadequate. The Civil Service Commission (now the Office of Personnel Management (OPM)) favored the benefit formula proposed by the House because it felt the amendment proposed by the Senate was too expensive and would result in the government's eventually paying substantially more than employees to support the benefit increases.

(3) NORMAL RETIREMENT AGE (OPTIONAL RETIREMENT)

Retirement with a full (unreduced) annuity is permissible at the option of the employee at age 55 with 30 years of service, at age 60 with 20 years of service, and at age 62 with 5 years of service.

Optional retirement within 2 years of normal retirement age (age 65) after 30 years of service was introduced in 1930. This was the rule until 1942, when the optional retirement provision was changed to permit retirement with an unreduced annuity at age 60 with 30 years and at age 62 with 15 years of service. This liberalization of the optional retirement provision was strongly supported by Federal employee unions, especially those unions whose members were affected by the mandatory retirement age at age 70 with 15 years of service. Most Federal unions at that time sought retirement after 30 years of service with no age requirement.

In 1956, the years of work required for optional retirement at age 62 was reduced from 15 to 5 years of service. In 1966, the optional retirement provisions were again liberalized by permitting retirement on unreduced annuity at age 55 with 30 years of service, at age 60 with 20 years of service, and at age 62 with 5 years of service. Optional retirement at age 55 and 30 years of service was a provision recommended by the President. His proposal, however, would also have permitted agency management to retire, without the employee's consent, any employee meeting the more liberal age and service requirements. This proposal was opposed by representatives of Federal workers and was rejected by Congress.

(4) COST-OF-LIVING ADJUSTMENTS (COLA)

Beginning in 1962, CSRS benefits became automatically adjusted for changes in the cost of living as measured by the CPI. Although this has proved to be the most costly single feature in CSRS, it was intended as a cost control measure to replace ad hoc benefit increases, which critics challenged as disorderly and oversensitive to political manipulation. The COLA mechanism was modified several times to make it more sensitive to price changes and thereby to reduce loss of retirees' purchasing power during intervals between adjustments. In 1969, an additional 1 percent (1 percent "kicker") was added to each COLA to compensate retirees for this loss. In

1976, Congress eliminated the 1 percent add-on because of claims that CSRS costs were becoming unmanageable. In its place, Congress enacted semiannual rather than annual COLA. These gave full and automatic adjustments to annuities for price changes recorded over 6 month periods.

The 97th Congress enacted several changes to CSRS to cut the costs. During the first session, COLA were made annual, thereby saving money by having benefits held constant for longer periods. In addition, a provision for computing awards using the last COLA before retirement (called a "look-back") was eliminated. In its second session, the 97th Congress agreed to further delay COLA by placing the adjustment on a 13-month cycle, thereby holding checks constant for 1 additional month. Congress also "capped" COLA for retirees under age 62 to one-half of the COLA projected by the Congressional Budget Office (CBO) for each of the next 3 fiscal years; these assumptions were placed into the law to assure retirees of receiving at least one-half of the "assumed" COLA, plus any amount in excess of the assumed amount. Both of these changes were for 3 years only. Congress also made numerous other changes to CSRS.

(5) DISABILITY

To be eligible for disability benefits under CSRS, an employee must have completed 5 full years of service and must be unable to perform the duties of his current grade and class of position. Agencies are instructed to restructure jobs wherever possible and to aggressively seek other suitable positions at the same salary and grade. In practice, employees unable to do one essential function of their jobs are considered to be totally disabled; the disability program does not provide for partial disability.

An employee eligible for disability receives either an annuity computed under the standard retirement formula, or, if larger, the lesser of 40 percent of high-3 average salary or the annuity that would have been paid if the employee had continued working until age 60 at the same high-3 pay. Employees with less than 22 years of creditable service generally receive the minimum. The annuity continues until the employee returns to work or is otherwise determined to be medically recovered, or until the disabled employee has found a job that in any one year pays at least 80 percent of the current salary for the position held prior to the onset of the disability. After entitlement, disability annuities are fully adjusted for inflation.

Critics of the present sick leave and disability structure make three objections. First, as in any disability program, there are inherent difficulties in accurately and objectively distinguishing legitimate claims of disability from claims that arise because of lack or loss of motivation.

Beginning in 1980, efforts by OPM to tighten the determination process have mitigated this concern somewhat because, according to the General Accounting Office (GAO), the rejection rate for disability applications has climbed from about 2 percent to 15 percent.

Whether substantial numbers of these initially rejected claims will be overturned during subsequent appeals is unknown. Testimony offered before the House Post Office and Civil Service Committee asserts that as many as half of these rejections may be overturned.

Second, because the program makes no allowance for temporary disability, some employees may be forced to choose between a period without income or applying for permanent disability retirement. If an employee exhausts accrued and advanced sick leave before completing a necessary period of convalescence, he could be without any income until able to resume working. On the other hand, if the employee chooses to apply for disability, there is no guarantee that once recovered he will be reassigned his previous job. The GAO points out that the administrative difficulties of reviewing the required evidence of medical recovery means that a recovered disability annuitant may be continued on disability income for an indefinite period, regardless of the employee's willingness to resume working or any hardships on the employee or his family.

Third, the distribution of disability benefits does not consider differences in employee characteristics, but is based upon salary and, to a lesser extent, years of service. There are, for example, no additional benefits for dependents of disabled workers; in contrast, workers in private industry employment can receive dependents' benefits in addition to their own disability benefits.

(6) SURVIVOR ANNUITIES

In general, to be eligible for an annuity, a surviving spouse must have been married to the employee for at least 1 year immediately before the employee's death, or, if married less than 1 year, must be the parent of the employee's child. All unmarried children under age 18, or, if full-time students, under age 22 are eligible for annuities.

The system provides annuities for both (a) survivors of employees with at least 18 months of creditable civilian service and (b) survivors of annuitants. The provisions covering these two groups differ somewhat; each group is treated separately below.

Each eligible *survivor of an employee* is given an annuity. A surviving spouse receives 55 percent of the employee's earned annuity at the time of death or a guaranteed minimum which is the lesser of:

—40 percent of the employee's high-3 average annual pay; or

—the annuity that would have been paid if the employee had continued working until age 60 at the same high-3.

Annuities to spouses are paid for life unless they remarry before age 60; benefits terminated for remarriage before age 60 may be reinstated if the remarriage is terminated by death, annulment, or divorce.

Each eligible child receives the lesser of (as of December 1982):

—60 percent of the high-3 average annual pay divided by the number of eligible children;

—$7,835 divided by the number of eligible children; or

—$2,612.

Higher annuities are paid to children of a deceased employee who is not survived by a spouse. Such children received the lesser of (as of December 1982):

—75 percent of the high-3 average annual pay divided by the number of eligible children;

—$9,402 divided by the number of eligible children; or

—$3,134.

Children's annuities, which are computed on the basis of the number of eligible children and the existence of a surviving spouse, are recomputed if any of these factors change.

If an employee dies with less than 18 months of creditable service of leaves no eligible survivors, the employee's CSRS contributions plus any accrued interest are paid in a lump sum to the designated beneficiary or heir.

Each eligible child and certain spouses who are *survivors of an annuitant* are given an annuity.

At the time of retirement, a retiree can accept either a full annuity without a survivor provision or a reduced annuity with a survivor provision. In either case, eligible children of a deceased annuitant are provided an annuity under the same conditions and in the amounts as the children of a deceased employee.

If the retiree accepts a full annuity without a survivor provision, then no annuity is payable to a surviving spouse. To obtain a full annuity, the retiree must waive survivor protection in writing. Provision for survivors is otherwise automatic.

If the retiree accepts a reduced annuity with a survivor provision, then a survivor annuity will be paid to a spouse beginning at the time of the retiree's death. The annual reduction in the retiree's annuity will be equal to 2.5 percent of the first $3,600 plus 10 percent of any amount over $3,600 that the retiree designates as the base for the spouse's survivor annuity. The spouse will receive an annuity equal to 55 percent of whatever portion of the retiree's annuity that the retiree designated as a base.

Annuities to spouses are paid for life unless they remarry before age 60; benefits terminated for marriage before age 60 may be reinstated if the remarriage is terminated by death, annulment, or divorce.

An unmarried employee in reasonably good health may at the time of retirement designate a beneficiary with an insurable interest in the employee's life to receive a survivor annuity. The reduction in the retiree's annuity will be equal to 10 percent of the retiree's annuity plus an additional 5 percent for each 5 full years the beneficiary is younger than the retiree; the total reduction cannot exceed 40 percent. The benefit to the named survivor is equal to 55 percent of the retiree's reduced annuity.

If an annuitant dies and leaves no eligible survivors or if survivor annuities end before the exhaustion of the member's contribution to CSRS, then the remaining balance plus any accrued interest is paid in a lump sum to the designated beneficiary or heir.

(D) Operations of CSRS Trust Funds

A fund was established at the beginning of the retirement system to provide a pool of assets out of which CSRS benefits could be paid. Revenue into the fund was first provided by money from employees. Beginning in 1928 Government appropriations were added to assure adequate assets to meet growing demands for benefits. The fund has been closely monitored to assure that sufficient assets are available to permit payment of benefits in a timely and dependable fashion.

It is worth pointing out that the CSRS trust fund is an account within the Federal Treasury. Any balance in the account is convertible to cash for benefits, but the conversion requires the use of *current* Federal revenue, in the form of taxes or borrowing. (The next section examines the distinction between CSRS trust funds as an account and as a method for identifying Federal obligations.)

Periodically, it has been necessary to increase revenue flowing into the fund to assure its continuing ability to pay CSRS obligations. This has been accomplished by increasing employee contributions, by increasing Government payments through existing sources, and by establishing new sources of income. The last such major adjustment occurred in 1969, with the passage of Public Law 91-93.

(1) Sources of Revenue

Under the provisions of Public Law 91-93, CSRS trust fund assets are built up from four main sources:

—Employees covered by CSRS pay 7 percent of their basic salary through payroll deductions. (Congressional employees and hazardous duty employees contribute 7.5 percent, Members of Congress contribute 8 percent.) These deductions are compulsory, except that membership in the plan is voluntary for Members of Congress and Congressional staff.

—Employing agencies transfer to CSRS amounts matching that paid by their employees.

—The U.S. Treasury credits funds to CSRS under specified conditions; the law requires two transfers from the general fund to the CSRS fund:

(1) Annual payments equal to—

(a) Interest on the unfunded liability—the total amount of obligation in excess of current assets and payments from other sources, as if that amount represented revenue actually appropriated and invested (the interest is currently 5 percent); and

(b) those portions of annuities paid during the year attributable to credit allowed for military service.

(2) Appropriations in 30 equal annual installments, to finance any increased liability resulting from legislation which authorizes—

(a) new or liberalized benefits *except* COLA;

(b) extensions of coverage to previously uncovered employees; or

(c) increases in salaries on which benefits are computed.

—The fund earns interest by investing revenue received from the above sources. Credit held by the CSRS account (trust fund) can, by law, only be invested in interest-bearing U.S. Government securities.

(2) Federal Worker Contributions to CSRS

When CSRS began in 1920, employee contributions were the sole source of CSRS revenues. In the early years of the system, revenue from employee payments was more than enough to pay CSRS benefits. By the end of the decade, Government support for CSRS benefits became necessary as CSRS outlays exceeded the amount of employee payroll taxes, mostly because the number of eligible beneficiaries was increasing.

Table 3.—CSRS FINANCIAL EXPERIENCE, FISCAL YEARS 1970–81 (INCLUDES OFF-BUDGET ENTRIES)

[In billions of dollars]

Fiscal year	Employee payments	Government payments (agency contributions, appropriations)	Interest on investments	Total CSRS revenues	Disbursements (benefits, refunds, administrative expenses)	CSRS trust fund balance (end of fiscal year)
1970	1.74	1.95	0.99	4.68	2.75	22.43
1971	1.92	2.66	1.23	5.81	3.23	25.02
1972	2.07	3.21	1.46	6.74	3.75	27.98
1972-Accr[1]	.13	.12	.05	.30	.32	29.96
1973	2.14	3.90	1.57	7.61	4.59	30.98
1974	2.33	4.82	1.85	9.00	5.79	34.18

Table 3.—CSRS FINANCIAL EXPERIENCE, FISCAL YEARS 1970–81 (INCLUDES OFF-BUDGET ENTRIES)—Continued

[In billions of dollars]

Fiscal year	Employee payments	Government payments (agency contributions, appropriations)	Interest on investments	Total CSRS revenues	Disbursements (benefits, refunds, administrative expenses)	CSRS trust fund balance (end of fiscal year)
1975	2.53	6.71	2.14	11.38	7.21	38.35
1976	2.78	7.88	2.46	13.12	8.41	43.06
1976-Transition Quarter [1]	.71	2.08	.72	3.51	2.28	44.29
1977	2.93	9.34	2.83	15.10	9.69	49.69
1978	3.19	11.04	3.42	17.65	11.01	56.32
1979	3.45	12.87	4.23	20.55	12.59	64.28
1980	3.69	15.56	5.14	24.39	14.98	73.69
1981	4.01	18.19	6.33	28.53	17.78	84.44
1982	4.14	19.45	7.84	31.46	19.48	96.01
Totals	37.79	154.19	42.26	234.24	123.86	....

[1] Accounting statement was changed from a cash basis in 1972 and from a fiscal year ending June 30 to one ending September 30 in 1976. These lines are adjusted to account for the changes.

[2] Fiscal year 1984 budget appendix.

Source: Office of Personnel Management. Office of the Actuary, 1982.

Beginning in 1928, the Federal Government began appropriating money to CSRS. The 1920 act had instructed the Secretary of the Interior to "submit annually to the Secretary of the Treasury estimates of the appropriations necessary to continue this act in full force and effect." It can thus be argued that from the beginning, the Government accepted the responsibility for all benefit costs not met by employee contributions.

At the point at which benefit payments exceeded employee contributions CSRS ceased to be solely an intergenerational transfer from working civil servants to civil service retirees.

CSRS has always been an entitlement program in the sense that CSRS benefits have always followed from legislative actions. It is also true that the payment of benefits in any amout reduces the spendable income of that segment of society which pays for them, and in that sense, retirement benefits are always intergenerational transfers unless they are fully paid in advance by the generation receiving them. Yet, once total CSRS benefits paid exceeded total employee contributions, their magnitude ceased to be limited to the aggregate amounts that could be collected from employees, but became payable to the extent that the claim on taxpayer dollars was politically successful. The difference is direct: in the first case benefits are limited to the amouts that can be collected from workers; in the second, revenues from taxpayers are committed to the extent the benefit formula drives their cost.

The following table displays the relationship between taxes collected from employees and benefits paid.

Table 4.—EMPLOYEE CONTRIBUTIONS AND CSRS BENEFITS PAID, 1921-82

[Dollars in millions]

Year	Total employee contributions	Contribution rate	Employees in selected years		Benefits and refunds
			Year	Number	
1921-28	$143	2½ percent	1920	330,000	$73
1929-35	208	Beginning 1930, 3½ percent.	1930	415,000	221
1936-40	187	3½ percent			309
1941-45	926	Beginning 1942, 5 percent.	1942	2,000,000	488
			1944	3,000,000	
1946-50	1,451	Beginning 1948, 6 percent.	1948	1,735,000	1,304
1951-55	2,075	6 percent			1,766
1956-60	3,408	6½ percent	1956	2,133,000	3,474
1961-65	4,714	6½ percent	1962	2,300,000	5,957
1966-70	6,825	Beginning 1969, 7 percent.	1969	2,700,000	10,937
1971-75	11,125	7 percent			24,820
1976-80	16,744	7 percent			58,841
1981[1]	4,006	7 percent	1981	2,700,000	17,733
1982	4,068	7 percent	1982	2,660,000	19,453
1983 (estimate)[1].	4,202	7 percent	1983	2,660,000	21,082

[1] Fiscal year 1984 budget.

Source: Office of Personnel Management.

As table 3 shows, employee taxes ceased to cover the costs of benefit payments early in the second decade of operation. During World War II, however, employment grew rapidly, and the contribution rate increased from 3.5 percent of payroll to 6 percent; employee contributions began to exceed benefit payments. This surplus of money collected from employees over benefits paid to retirees lasted until the beginning of the 1960's, when the increase in Federal employment a generation earlier began to be reflected in the increase in workers reaching retirement age.

Two effects of this surplus of payments collected over benefits paid are noteworthy here: the CSRS trust fund as an account showed increasing balances over the period, and Federal employee retirement taxes financed other operations of the Federal Government besides CSRS retirement. This latter follows from the requirement that all CSRS revenues in excess of benefit payments be invested in the Federal Treasury. Thus, Federal employee contributions to CSRS are not only revenue to CSRS, but also to the Federal Government, and during years when employee payments to CSRS exceeded benefit payments, those excess contributions became revenue available for other Federal expenditures through investment of CSRS assets in treasury securities.

(3) ITEMS OF DISBURSEMENT

The CSRS fund is used to pay benefits to participants, manage revenues from contributors, and monitor the value of accruing entitlements. Current benefit payments, refunds, and administrative expenses are deducted from the fund. All revenue in excess of that needed for current benefit payments and operating expenses is invested in Government securities specifically authorized for that purpose. The fund is evaluated each year and costs of accruing entitlements are estimated.

As table 4 shows, total budget outlays, (mainly for benefit payments) are projected to total $325.6 billion over the next 10 years. Employee contributions are projected to be $64.7 billion, with the remaining $260.9 billion (80 percent) coming from the Government's regular revenue sources: taxes and sale of securities to the public. During the same 10-year period, the CSRS trust fund will actually increase by $171.8 billion because income to the trust fund (see table 4 below) is growing faster than budget outlays.

Table 4.—RECEIPTS AND EXPENDITURES FOR CIVIL SERVICE RETIREMENT, 1983-92: TWO PERSPECTIVES

[In billions of dollars]

A. Receipts and expenditures perspective:	
Budget expenditures	325.6
Receipts	64.7
Excess of expenditures over receipts [1]	260.9
B. Trust fund perspective:	
Income to the trust fund	497.4
Budget expenditures	325.6
Net increase in fund	171.8

[1] $30 billion of this will come from Postal Service contributions.

Source: Office of Personnel Management and Hay Associates. Social security II-B assumptions.

ISSUES IN CSRS

(A) Financing Issues in CSRS

The civil service retirement and disability fund acts as a disbursing mechanism out of which benefits are paid. The fund is maintained as an account in the U.S. Treasury, with balances listed as assets. Its assets are specially created Federal financial instruments designed to mature as needed for benefit payments.

As noted above, the fund's revenue comes from employee payroll taxes and from various Government payments. In fiscal year 1982, the CSRS fund took in $31.4 billion, of which $4.1 billion came from employee payroll deductions, an equal amount from their agencies, $7.8 billion in interest and the remaining $15.4 from direct Government payments. The impact of the trust fund upon the budget and upon taxpayers is equal to the difference between disbursements to individual participants through benefits and refunds, and the amount of employee payments to the fund.

In contrast to the contractual rights employees in private pensions enjoy, the rights possessed by CSRS participants are essentially political. CSRS benefits are entitlements, and thus are subject to congressional action defining the eligibility for an amount of the entitlements. Accrued private pension rights cannot be reduced unilaterally by employers. In contrast, the entitlement rights earned through Federal employment are not guaranteed by the Employee Retirement Income Security Act (ERISA), nor could they be—the power of a legislature to not be bound by its previous acts implies that entitlement benefits are granted at the discretion of any particular Congress. Consequently, CSRS benefits are guaranteed by Congress, and are subject to change as Congress deems necessary.

Therefore, the CSRS trust fund does not bear the same relationship to its benefits as a private pension fund bears to its. The existence of a CSRS trust fund does not guarantee the payment of any specific pension amount, nor does the lack of a sufficient reserve balance imply that benefits cannot be financed. Military retirement, for instance, is not financed through a trust fund—its payments are met by annual appropriations.

Because CSRS trust funds are invested in special Government securities, CSRS benefits are in actuality financed on a pay-as-you-go basis. Converting CSRS trust fund reserves into benefit checks that can be cashed by beneficiaries requires funds sufficient to redeem an equivalent amount of the special securities, and this money can come only from taxes or borrowing. In any given year, it is the direct relationship between current benefit payments and current employee payroll deductions to finance those pensions that constitutes the true current impact of CSRS on taxpayers.

(1) Civil Service Entitlements Compared to Private Pensions Rights

The CSRS benefits are entitlements; their payment is established by act of Congress. Entitlements are subject to change; the laws of one Congress are not binding upon succeeding Congresses. Thus, CSRS benefits are guaranteed only so long as political support to maintain them endures.

The CSRS benefits differ in the nature of funding from those of private defined benefit pension plans to which CSRS plans are often compared. The CSRS benefits are established by act of Congress and are secured by the financial integrity of the Federal Government. Private pension plan benefits are available through the financial practices employed for the plan by its sponsors, and are secured by the requirements set for those practices by ERISA. The philosophy underlying ERISA implies that plan sponsors are to be prevented from promising more benefits than they can deliver, but required to deliver all benefits they promise.

Prior to ERISA there generally were no minimum governmental requirements for sponsor liability to private pension plans. In fact, if a plan was ended with insufficient assets, the sponsor had no legal liability to pay the deficit. The sponsor's legal liability was limited to the assets in the pension trust fund supporting the plan.

The ERISA seeks to safeguard pension benefits of employees. If a private pension plan is terminated with insufficient funds, vested benefits up to certain limits are insured by the Pension Benefit Guaranty Corporation (PBGC). The requirements imposed by ERISA upon pension plans are intended to assure payments of benefits which could be endangered by inadequate financing or business failure.

The CSRS is not subject to ERISA requirements and does not build reserves on the basis required of private plans. The CSRS benefits are transfer payments granted by entitlement and do not depend upon the existence of monetary reserves, or the continuation of a business enterprise, and are not insured by PBGC. Because the Federal Government may raise revenues and allocate moneys to sustain programs in which it has a substantial interest, the safeguards to private pensions imposed by ERISA requirements are not considered appropriate for CSRS. Unlike the annuities of private pension plans, a relationship need not exist between the value of future benefits and the assets held in trust by the CSRS fund, in order for CSRS benefits to be secure against economic uncertainty. As a continuing institution, the Federal Government provides a reasonable expectation of a dependable stream of revenues sufficient to finance retirement annuities at the time they are actually paid.

In private pension plans, a close relationship exists between the value of assets held and the value of benefits which can be paid from the pension fund. The ERISA requires employers to contribute to pension plans amounts sufficient to fund retirement costs attributable to the current year, and amounts sufficient to fund any additional unfunded liabilities over a specified period.

Thus, in private pension plans, the amount of benefits is directly affected by revenue constraints. Higher pensions mean higher costs to workers, employers, or both. This increase in costs occurs because, generally, in private pension plans, the amount of the scheduled retirement annuity determines the amount which must be set aside during the course of an employee's work career so that regular payments can be made at retirement. The cost of this type of annuity is determined by estimating the amount of money which must be invested over the work span so that its accumulation plus interest will permit the payment of benefits over the estimated span of retirement. Therefore, if additional benefits are desired, additional burdens must be borne by plan sponsors, whether employees, employers, or both.

This direct cost constraint is not so clear in CSRS. The structure of CSRS entitlements is a consequence of policy set by Congress and implemented by the executive branch. Some policy spokesmen believe that the Federal Government should set a standard to which private sector employment practices can be compared. They argue that the Federal Government is free to experiment in benefit design in a way no private plan can, precisely because it can modify benefits to satisfy overall policy objectives and can do so independently of any particular level of retirement fund reserves. While this may be true, it should also be understood that the capacity of the CSRS fund to meet any financial obligation does not depend upon the solvency of a sponsor which must compete in a marketplace for available money, but upon the capacity, and will, of the Federal Government to appropriate needed revenue and to raise taxes or otherwise increase the Federal Government's capacity to spend money.

(2) MEASURING CSRS RETIREMENT COSTS

The cost of CSRS benefits can be established by calculating the average present value of future benefits at the time when the right to those benefits is being earned. Given the orders of magnitude involved in Federal employment, the present value of these entitlements can be reasonably stated, including any additional value attributable to adjustments for inflation. Trends in longevity, retirement age, disability, years of service, promotional patterns, and dependency status can be calculated with reasonable accuracy to determine the cost of present benefits plus accruing future entitlements, and to state that cost as a percentage of current payroll.

This analysis of expected employee benefit experiences produces an estimation known as the "normal cost" of system benefits. Normal cost is defined as the present value of future benefits divided by the present value of future compensation, for a typical group of new entrants to the retirement system. In other words, normal cost is the percentage of every paycheck that should be contributed over the total career of each employee of a group of new entrants, to fully pay for all benefits to be received by that group. Expressing these values as a percentage of payroll is a way to measure costs of various pension plans; the normal cost expressed as a percentage of payroll is therefore the system cost of accruing rights to which new employees are entitled.

(a) Dynamic Versus Static Costs

The provisions of Public Law 91–93 spell out the methods by which CSRS costs are to be funded. As stipulated in the law, the costs of CSRS are funded on a static basis, which excludes consideration of *future* increases in annuity and salary levels caused by COLA and inflation-driven salary increases. Thus, the "static normal cost" assumes that the entering employees will receive promotions from one grade to the next, but that the wages of those grades will remain the same year after year. Static valuation also excludes any impact on benefit costs of COLA. Each year, changes in CSRS obligations caused by wage increases and COLA in the *previous year* are applied to projections of future benefit costs. New wage and benefit levels caused by prior wage increases and COLA are then assumed for the new cost valuations.

Since the CSRS financing mechanism ignores the impact on CSRS costs of future inflation and wage growth, the true cost of CSRS benefits is significantly understated. Therefore, CSRS costs are projected using "dynamic" valuation methods that include assumptions about wage increases, inflation, and interest rates. Proponents of dynamic valuation believe that this measurement of the cost of CSRS benefits will act to prevent benefit liberalization. Defenders of the use of static assumptions say that dynamic assumptions lead to easy acceptance of inflation and its subsequent effect on benefit growth.

It should be appreciated that arguments about the difference between "dynamic" or "static" actuarial methods are arguments about methodologies that have no direct bearing on costs. They are strictly arguments about how to measure costs of future benefits. Actual costs are determined by the benefit checks at the time they are issued, an amount that is subject to change only if the benefit formula is changed. The dynamic costing method most clearly represents this cost.

The following table compares dynamic and static costs of CSRS benefits. These estimated costs were developed in 1977, and are the latest complete system cost evaluation.

Table 6.—CSRS NORMAL COST AS PERCENT OF PAYROLL AS OF SEPTEMBER 30, 1977

[In percent]

	Static [1]	Dynamic [1]
Annuities to employees:		
Optional retirement	6.47	20.69

Table 6.—CSRS NORMAL COST AS PERCENT OF PAYROLL AS OF SEPTEMBER 30, 1977—Continued

[In percent]

	Static [1]	Dynamic [1]
Involuntary	1.12	3.23
Disability retirement	2.55	5.08
Deferred separation	.28	.36
Subtotal	10.42	29.36
Annuities to survivors:		
Widow(er)s of active employees	.46	1.07
Widow(er)s of annuitants	1.05	4.28
Children	.16	.21
Subtotal	1.67	5.56
Lump-sum payments	1.41	1.03
Additional benefits for certain groups	.18	.46
Administrative expenses	.05	.05
Total benefits and expenses	13.73	36.46
Less: current employee contributions	7.00	7.00
Employer normal cost percentage	6.73	29.46

[1] Principal economic assumption:
Interest: Static, 5 percent; dynamic, 7 percent.
CPI: static, 0; dynamic, 6 percent.
Salary inflation: static, 0; dynamic, 6.5 percent.

Source: Board of Actuaries. Civil Service Retirement System. Fifty-seventh Annual Report.

(3) FUNDED AND UNFUNDED LIABILITIES

The CSRS trust fund, as an account within the Federal budget, had a positive balance of about $96 billion at the end of fiscal year 1982—a balance which could increase to over $280 billion over the next 10 years if current law prevails. That balance exists as special U.S. Treasury securities automatically credited with interest. Each year, revenues to the trust fund are computed and benefits are subtracted; the difference is then added to the previous balance. For the foreseeable future the CSRS account balance will increase.

The CSRS revenue comes from several different sources: (1) Employee contributions are determined, and (2) matched by payments from each employing agency's "salary and expenses" appropriations. This matching employee and employer payroll deduction is roughly equal to the static normal cost, but 40 percent of dynamic normal cost.

(3) Credit is granted to the account for benefits paid based upon military service, and for any past service liability created by extending CSRS coverage to groups previously not participating.

Each year that a general schedule wage increase is granted, a computation determines the effect upon future benefit liabilities created by granting those salary increases; (4) credit is granted to the account equal to 30-year amortization of that additional liability, plus appropriate amortization payments from previous years in which a salary increase was granted and a similar computation was made.

The total "unfunded liability" is computed as the difference between the present value of future benefits (after including previous COLA but making no assumptions about future COLA), and the present value of the fund and future scheduled revenues. This amount is treated as if it also existed as an investment of the account in the Treasury, and (5) interest on that unfunded liability is computed and credited to the account. Finally, (6) the stated interest on the special issues representing the account balance is credited to the account.

(4) UNFUNDED LIABILITIES

Since 1920 employees have contributed to CSRS. Although the act established a requirement for the Federal Government to pay "appropriations necessary" to pay for the benefits, until 1969 no consistent method was adopted to both calculate accruing liabilities and to appropriate to CSRS funds for the payment of those liabilities.

In the first 8 years of CSRS (1920-28) no appropriations were recommended or enacted. From 1929 to 1949 appropriations were made to cover static normal costs and to amortize unfunded liabilities by the end of the century. From 1950 to 1956, appropriations did not follow any specific rationale but were generally insufficient to cover normal costs and additional amounts to reflect growing liabilities. In several years, appropriations were actually less than requested or the request was lower than the amount needed for minimum funding. In 1956, Congress required that the Government at least match the employee contribution. Public Law 91-93 in 1959 added automatic appropriations to fund the additional liabilities.

It is sometimes asserted that the CSRS unfunded liability exists because the Federal Government did not credit to the CSRS account its proper share of normal costs during some years prior to Public Law 91-93. That assertion vastly overstates the case, because the amount the Federal Government did not contribute—$2.6 billion—totals less than $10 billion including lost interest. The financing mechanism of P.L. 91-93 generates substantially higher annual Federal payments to CSRS automatically.

Actually, CSRS unfunded liability is almost entirely the result of annual wage increases and benefit COLA, neither of which is included in the computation establishing the employee and employer static normal cost, the basis upon which the fund has always been evaluated. Many people mistakenly think that CSRS costs are fully paid by total employee/employer payroll deductions of 14 percent, i.e., the current static normal cost. This would be so only if there had been no wage increases or COLA.

The unfunded liability, the difference between projected future assets and liabilities, amounts primarily to the difference between the benefit rights earned by workers (35 percent of payroll) and payroll taxes credited to them (14 percent of payroll) that is, to 21 percent of payroll. Unfunded liability on a static valuation is about $200 billion, and over $500 billion when valued on a dynamic basis.

However, for purposes of converting obligations to cash for benefit payments, CSRS draws upon current employee payroll deductions plus other Federal revenues (i.e., taxes and borrowing). Any CSRS fund income in excess of benefit payments is maintained in the U.S. Treasury as credit to the CSRS account. In effect, by investing money from CSRS in special Federal securities, the Federal Government has written an I O U to itself. When it comes to redeeming those I O U's, the Government must still raise revenues from its normal sources. Neither liabilities nor assets of the account can be converted to cash for benefit payments without new Federal revenues (i.e., taxes and borrowing, etc).

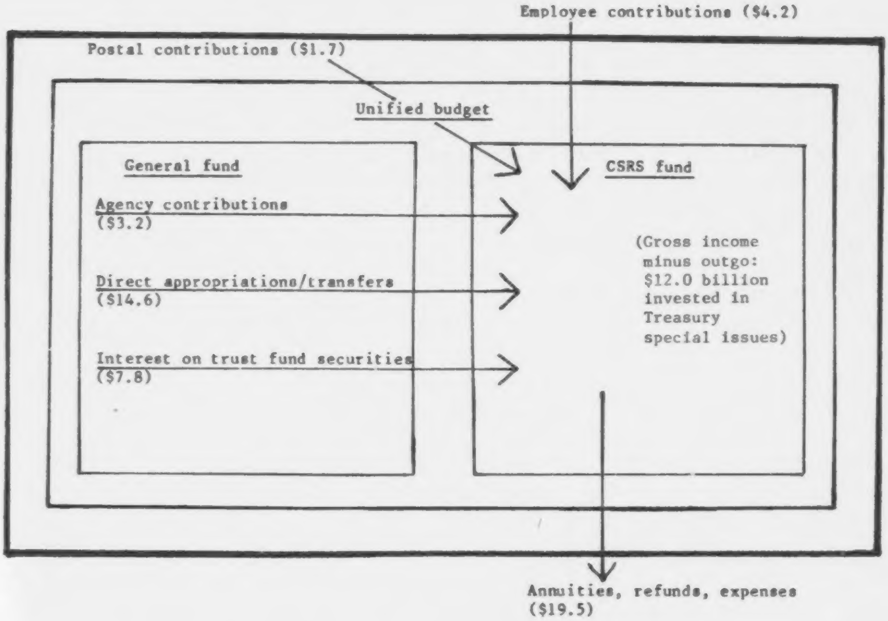
Because the CSRS fund is a part of the unified budget of the Federal Government, all payments to the fund from the Treasury, and all account balances invested by the fund in Treasury-held securities, are intragovernmental transfers. If Congress appropriated additional revenue from the Treasury to the fund to establish credit against accruing future liabilities, the additional revenue would immediately return to the Treasury in the form of investments in Treasury securities held in trust for CSRS, because this credit would be more than needed for immediate payments to beneficiaries. The transactions would cancel each other. The CSRS fund, as a Government account, would show a higher account balance. This credit would, however, be reflected in a corresponding increase in the gross Federal debt, but would not increase the total debt held by the public. There would be no effect on CSRS participants, nor on taxpayers, if amounts were credited to the fund beyond revenue needed for operating expenses (i.e., benefit payments, refunds, and administrative expenses).

Thus, the only change would be in the manner in which CSRS obligations are defined. Currently "unacknowledged" statutory obligations of CSRS called "unfunded liabilities," would become acknowledged obligations called "assets," a change little more than semantic. Both assets and unfunded liabilities require future taxpayer dollars to be converted to cash for benefit payments when the payments became due.

The following table shows operations of the CSRS fund in its relationship to the U.S. Treasury and the Federal budget. The effect upon taxpayers is equal to the difference between total expenses and employee contributions. Any excess CSRS revenues are converted to treasury special issues, and increase the balance of CSRS and the gross Government debt by the amount of that excess.

Table 7.—FLOW OF FUNDS INTO AND OUT OF THE CSRS TRUST FUND

[1982 dollars in billions]


Employee contributions ($4.2)
Postal contributions ($1.7)
Unified budget
General fund
CSRS fund
Agency contributions ($3.2)
Direct appropriations/transfers ($14.6)
Interest on trust fund securities ($7.8)
(Gross income minus outgo: $12.0 billion invested in Treasury special issues)
Annuities, refunds, expenses ($19.5)

Source: Budget of the United States Government Fiscal Year 1984, Appendix I-V 102.

Most employees covered by CSRS work for Government agencies and, therefore, the benefits and contributions of CSRS directly affect the unified budget. There are some agencies, notably the Postal Service, with financial operations outside of the unified budget. Therefore, it could be argued that a change in the law that increases payments to the trust funds by the Postal Service and other outside agencies should be treated as additional income to the Government, and viewed as a partial offset of CSRS costs. However, in the larger sense, it is likely that increases in payments by the Postal Service, or similar agencies, would result in net outlay reduction because these would affect the amount of direct or indirect subsidy from the Government to the large off-budget agencies, or in the case of the Postal Service, increase postal rates. Therefore, since one important concept in CSRS costs is the relationship between the operations of the Federal Government and Federal taxpayers, it is appropriate to treat the entire budgetary impact of CSRS under the general equation of employee contributions minus benefits. It should be kept in mind that any transfers from off-budget agencies to the trust funds are offset against outlays for unified budget purposes, but may indeed have other implications for the relationship between the Government and citizens if those agencies must modify expenditures and revenues within their own financial operations to meet additional costs imposed by changes to CSRS. Furthermore, changes in financial operations of off-budget agencies will alter the distributional burden of costs on citizens or groups affected by those agencies, as in the case of the Postal Service, where increased labor costs may be passed more heavily to some patrons than to others.

(5) INVESTMENTS

CSRS currently invests assets credited to its account in specially designed Federal financial instruments. In its impact on beneficiaries, taxpayers, and the Federal budget, the CSRS trust fund is no more than a disbursing mechanism, a spiraling series of paper transactions that assure adequate authority to issue benefit checks as prescribed by law. Investment of funds outside the Government would not significantly alter the effect of CSRS on taxpayers or beneficiaries. Because these investments would require the use of funds the Government now considers available for current expenditures other than retirement, investing CSRS assets outside the Government would require additional revenue (taxes or borrowing) equal to the investments in each year unless the total investment was financed from increased employee payroll deductions.

(6) ANALYSIS OF CSRS COSTS

Critics of CSRS often argue that the system's costs are too high. This charge usually means one of three things: (a) liberalizations to other components of personnel compensation cannot be made because retirement costs are too high; (b) benefits are too generous and thus costs are too high compared to prevailing private plan practice, or (c) the level of public money necessary to support the system has become politically intolerable.

(a) Compensation Objectives

The general objectives of compensation policy are to recruit and retain qualified employees. Conventional analysis suggests that younger workers value current compensation (wages) and older workers value retirement. Thus, the thinking goes, younger workers can be attracted by relatively high salaries that climb fairly rapidly through the middle of their careers. Gradually, salary increases would taper off. Older employees would remain working until eligible to retire because of the attractiveness of the retirement plan.

In recent years, administration analysts have recommended holding Federal wage increases down partially on the grounds that retirement costs are too high. If the number of qualified applicants for Federal jobs was declining, it could be argued that Federal salaries should increase to encourage more potential workers to apply. However, during this prolonged economic downturn, Federal jobs have been considered attractive, and finding qualified workers has not been a problem, according to the OPM.

The conclusion can be drawn that the cost of CSRS has not resulted in salary constraints of sufficient impact to adversely affect recruitment. Nor is there evidence that younger employees are leaving their jobs to take employment in the private sector in numbers that threaten the objective of a stable work force. (A return to high employment conditions in the economy could alter this finding.) A 1980 study published by the American Enterprise Institute (AEI), *Wage Policy in the Federal Bureaucracy* by George J. Borjas, shows that from 1955 to 1978 the rates of quitting and overall separation were below those of the manufacturing sector. The author suggests that the primary explanation for this difference is that "Federal wages tend to be above those in the private sector" (p. 10). The study also indicates that over the period, higher wages have had a marked effect upon the relative economic position of Federal and private sector workers. It should be noted that several studies dispute this finding, instead these other studies show that Federal workers lag as much as 20 percent behind their private sector counterparts. The following table displays these comparisons.

Table 8.—COMPARISON TURNOVERS IN THE FEDERAL GOVERNMENT AND IN THE MANUFACTURING SECTOR, 1955–78

Year	Federal Government		Manufacturing	
	Separation rate	Quit rate	Separation rate	Quit rate
1955	1.8	1.0	3.9	1.9
1956	1.8	.9	4.2	1.9
1957	2.0	.9	4.2	1.6
1958	1.7	.7	4.1	1.1
1959	1.8	.8	4.1	1.5
1960	1.7	.7	4.3	1.3
1961	1.7	.6	4.0	1.2
1962	1.8	.7	4.1	1.4
1963	1.7	.6	3.9	1.4
1964	1.6	.6	3.9	1.5
1965	1.9	...	4.1	1.9
1966	2.2	...	4.6	2.6
1967	2.3	1.1	4.6	2.3
1968	2.1	1.0	4.6	2.5
1969	2.0	1.0	4.9	2.7
1970	1.8	.9	4.8	2.1
1971	1.6	.6	4.2	1.8
1972	1.7	.7	4.2	2.2
1973	1.8	.7	4.6	2.7
1974	1.9	.7	4.8	2.3
1975	1.8	.6	4.2	1.4
1976	1.8	.6	3.8	1.7
1977	2.1	.7	3.8	1.8
1978	2.1	.7	3.8	2.1

NOTE.—Quitting and separation data refer to the monthly turnover rate per hundred workers.

Source: Borjas, George J. "Wage Policy in the Federal Bureaucracy." American Enterprise Institute, 1980. p. 7.

Although no thorough study has been conducted to determine the effect of holding salaries down, initial indications are that employees have been prompted to retire sooner than they otherwise would. The average length of service at retirement, after having climbed throughout the 1970's, declined from slightly over 30 years in 1980, to slightly under 30 in 1981, to 28 years in 1982. One explanation for this drop could be in the relationship between COLA and Federal wage growth. When annuities climb at the same rate as prices while wages increase at a slower rate, eligible workers are presumably encouraged to retire and draw annuities that climb faster than their wages.

(b) Costs Compared to Other Retirement

A typical private pension integrated with social security, might cost roughly 5 to 10 percent of payroll. Many private sector employees also receive other deferred compensation benefits that can average 5 percent of payroll. Adding that costs to the longrun cost of social security increases the total retirement cost to around 20 percent of payroll for typical private plan employees. The employer-paid portion of CSRS is around 29 percent or between 50 and 64 percent higher. These figures are very rough since such comparisons are difficult to make given differences in benefit structure, eligibility and objectives.

As has been pointed out, CSRS differs from a combination of a private plan and social security in two crucial ways. First, CSRS pays full and automatic COLA on the entire benefit, while in non-Federal plans, usually only social security is fully adjusted. Second, while the initial CSRS benefit roughly approximates the combined pension and social security benefits received by many employees with full careers in private employment, CSRS beneficiaries can receive those benefits at age 55 with 30 years of service. Age 55 retirement provisions are not uncommon in private employment, they almost always result in reduced benefits. Furthermore, reduced social security benefits are not payable until age 62, and full social security benefits are not payable until age 65.

In private plans, with their need for predictable and controllable pension expenses, adjustments for inflation are usually ad hoc. Plans with periodic adjustments usually limit those increases to 3 percent per year or less. Private plan beneficiaries do receive full and automatic COLA on any social security benefits they receive. Yet, social security benefits are not available until age 62, with full benefits available at age 65, while CSRS benefits can be received, in some cases, much earlier. To evaluate the cost of CSRS as it differs from private plan practice, a 1982 Congressional Research Service (CRS) study assumed a reduced COLA of 70 percent of annual inflation as measured by the CPI. This 70 percent figure was taken to roughly represent the value of that portion of CSRS benefits comparable to social security, plus some adjustment to the remaining private pension portion.

The 1982 study also measured the cost effects of CSRS early retirement. It was assumed that introducing reduction factors of 3 percent for each year under age 60 would cause retirements to be delayed to ages more closely approximating typical private plan practice. These plans sometimes permit early retirement by applying reduction factors.

The following table shows the change in normal cost as percent of payroll and as a percent of plan costs, of the differences between CSRS and typical private plans and CSRS resulting from the latter's full COLA and early retirement features.

Table 9.—COST OF COLA AND EARLY RETIREMENT CONSIDERED AS DIFFERENCES FROM PRIVATE PENSION PRACTICE

	Percent of payroll	Percent of plan cost
Reduce COLA from full to 70 percent of CPI changes	3.71	11.9
Discourage early retirement by adding reductions (3 percent per year under age 60)	1.35	4.3

(c) Cost of CSRS Has Become Politically Intolerable

CSRS is primarily paid for out of taxpayer dollars. Thus, during a climate of budget restraint, CSRS presents an obvious target. Nor will this change. The following table shows the projected CSRS revenue over the next 10 years. As can be seen from the table, employee payroll deductions constitute a declining portion of CSRS revenue.

Table 10.—PROJECTED SOURCES OF REVENUE TO THE CIVIL SERVICE RETIREMENT FUND

[In billions of dollars]

Year	Employee contributions	Agency contributions	30-year amortization payments	Interest on unfunded liability	Military payment	Investment income	Total income
1983	4.70	4.70	5.10	9.80	1.50	9.70	35.50
1984	5.00	5.00	6.00	10.50	1.70	10.80	39.00
1985	5.40	5.40	6.90	10.90	1.80	11.80	42.20
1986	5.80	5.80	7.70	11.20	1.90	12.70	45.10
1987	6.20	6.20	8.60	11.60	2.00	13.50	48.10
1988	6.60	6.60	9.50	12.00	2.10	14.30	51.10
1989	7.10	7.10	10.50	12.40	2.10	15.10	54.30
1990	7.50	7.50	11.50	12.80	2.20	16.00	57.50
1991	8.00	8.00	12.50	13.20	2.30	16.80	60.80
1992	8.40	8.40	13.50	13.60	2.40	17.70	64.00
Totals	64.70	64.70	91.80	118.00	20.00	138.40	497.60

Source: Office of Personnel Management. Office of the Actuary. Based on social security II-B assumptions.

Over the long run (75 years), CSRS will continue to be an expensive component of Federal employee compensation. The following table (derived from table 4 in the "Overview" chapter) shows long-term CSRS costs using two sets of economic assumptions (II–B and III).

Table 11.—CURRENT ESTIMATE OF DYNAMIC LONG-TERM COST FOR CSRS

[Percent of payroll]

	Intergenerational (pay-as-you-go)	
	II–B	III
Civil service retirement	36.1	40.6

(B) Options To Reduce CSRS Costs

The CSRS costs have been defined in two ways in this paper: The long-term real costs of benefits as projected using actuarial analysis, and budget costs, the effect upon taxpayers of CSRS in any particular year. Some changes that reduce CSRS costs have an immediate and noticeable effect upon Federal budget costs by either increasing the contributions of employees or by reducing the benefits current retirees would otherwise receive. Other changes take longer to have an impact on CSRS costs because they are applied to prospective retirees. However, in both cases, cuts to CSRS reduce the total amount of benefits affected participants receive over the course of their lifetimes.

(1) Increase Costs to Participants

There is nothing magical about the current employee contribution rate of 7 percent (7.5 percent for certain special categories, 8 percent for Members of Congress). It pays approximately one-fifth of both the current year budget costs and long-term costs as a percent of payroll. Fiscal year 1982 benefit payments of CSRS were $19.5 billion, employees contributed $4.1 billion. Thus, current employees paid about 21 percent of the cost of current beneficiaries' benefits in that year. On a long-term basis, the CSRS Board of Actuaries estimates that long-term costs of CSRS benefits are about 36 percent of payroll. Employees' 7 percent payroll deductions thus constitute about 20 percent of the long-term cost of their own benefits.

The administration's fiscal year 1984 budget recommends increasing the amount withheld from employee salaries for CSRS contributions by 2 percentage points in 1984 and 1985, making the total deduction 11 percent and reducing benefits to achieve a total cost of 22 percent of payroll. The rationale offered for this recommendation suggests the Federal workers should bear one-half the cost of their retirement.

Table 12 displays additional revenue from these changes in contribution rates.

Table 12.—REVENUE FROM INCREASING FEDERAL WORKER RETIREMENT CONTRIBUTIONS, FISCAL YEARS 1984-88

[In billions of dollars]

Fiscal year	Revenue
1984	1.3
1985	2.7
1986	2.8
1987	3.0
1988	4.0
Total	13.8

Source: Congressional Budget Office.

Because Federal retirement contributions are deducted from gross pay, this change would cause a dollar-for-dollar reduction in take-home pay equal to the new rate. These increases in contributions are only one part of the administration's 1984 budget proposals. In addition, this proposal would reduce benefits received under CSRS by nearly 40 percent. The administration's proposals for cutting benefits are analyzed below.

(2) REDUCE THE NUMBER OF INDIVIDUALS RETIRING

One way to reduce CSRS costs is to reduce the number of individuals entering the beneficiary rolls. The most obvious ways to accomplish this are to raise the earliest age of eligibility and the number of years of service required. In either case, short-term budget savings are realized because the amount of payments which would otherwise be made is less. Long-term savings depend upon whether the requirement to perform additional service will yield higher benefits, and if so, will the additional amounts paid over a shorter beneficiary lifetime equal the smaller benefits which would have been paid over a longer period had the beneficiary been allowed to retire earlier.

Another way to reduce the number of new benefits awarded is to discourage early retirement without actually prohibiting it. This is usually accomplished by reducing benefits awarded before a certain combination of age and service. The reduction schedule can be the same for each year of retirement under a certain age, or it can be a sliding scale, with bigger percentage cuts made for benefits received at earlier ages. In this method, smaller reductions would apply to benefits received nearer to the "normal" age of retirement. Depending on the size of the reduction, these factors can have an impact on the size of awards, but usually they have the effect of discouraging earlier retirements.

The administration's fiscal year 1984 budget proposes to reduce the number of workers retiring early. Current law provides that civil service employees may retire with full benefits as early as age 55 with 30 years service. The budget proposes to reduce the annuities of an early retiree by an actuarial factor—5 percent for each year the worker chooses to retire before age 65. This change would be phased in over a period of 10 years, and employees age 55 or over at enactment would not be affected. The reduction would not apply to persons retiring because of disability. The current-law reduction of 2 percent for individuals reduced-in-force (RIFed) or whose jobs are abolished under age 55 (with service below 25 years) would either be an additional reduction, or individuals would no longer be eligible for this special early retirement. The budget is silent on the issue.

(3) REDUCE AMOUNT OF AWARDS AT RETIREMENT

Another obvious way to reduce CSRS costs is to reduce the amount beneficiaries receive at the time their benefits are awarded. There are two basic ways to accomplish this reduction: Benefits are computed by multiplying a salary amount by percentage factors; either the salary base or the percentage factors could be changed.

In CSRS, the computational formula increases for each year of service. The current formula is identified in pension language as "back-loaded" because lower factors are earned during early years and higher factors in later years. In CSRS these factors, for most employees are:

—1.5 percent for each year of service up to 5, plus
—1.75 percent for each year of service for years 6 through 10, plus
—2.0 percent for each year thereafter.

These factors could be reduced thereby yielding smaller "replacement rates,"—the rate at which the retirement benefit replaces preretirement earnings. The more generous computational factors for Members of Congress, legislative employees, and other special groups would presumably also be changed at the same time.

In CSRS, these replacement factors are applied to the average of the highest 3 consecutive years of salary (high-3). The administration's fiscal year 1984 budget proposes to expand the salary base to the highest 5 average salary years. As recently as 1969, the formula for computing annuities was based on the average of an employee's 5 highest salary years; since then the 3 highest salary years have been used. Employees within 3 years of retirement eligibility would not be affected by the change.

The change from the current high-3 reduces the effect on the salary base of salary increases near retirement, by averaging those increases over a longer period. The present formula favors employees with upward slopes in income to the date of retirement by basing the formula on a narrow range of high salary. Usually, highest salary occurs just before retirement. A narrower salary base produces an annuity more closely linked to the typically higher final salary. Employees whose salaries have been relatively constant over 5 years would be less affected than employees with rapid increases near retirement.

In the current CSRS, late career promotions and step increases have significant effects on the size of annuities. Thus, this change would reduce the effect on annuities of any increases in salaries because of a late career promotion, but would have less effect on the annuities of retirees whose incomes had been held at a "cap" in maximum salary for several years.

(4) REDUCE BENEFIT GROWTH AFTER RETIREMENT

The most costly CSRS feature has been its method for adjusting benefits for inflation. According to a 1980 study, each 1 percent COLA increases long-term plan costs by 10 percent; as inflation increases, plan costs rise at ever-escalating rates. If inflation is 6 percent, full and automatic COLA will double the costs of CSRS over what it would be if none were paid.

The COLA is computed by calculating the percentage increase (adjusted to the nearest one-tenth of 1 percent) in the CPI occurring over the previous 12-month period ending December 31.

In the second session of the 97th Congress, attention of budget cutters was directed toward "indexing," or the mechanism by which COLA are automatically granted to Federal civilian and military retirement annuities. At issue was indexing itself. Critics wanted to repeal the automatic CPI-based COLA and return to the use of ad hoc adjustments of a specific amount chosen by Congress (in this case 4 percent). Defenders of the current mechanism wanted to retain the apolitical nature of the automatic link to CPI changes. Proponents of the CPI mechanism maintain that it is a fair and reasonable method of protecting vulnerable retirees against inflation; critics say that it is an unwarranted and costly burden on taxpayers. Some critics also argue that because entitlements occupy such a significant portion of the Federal budget, automatic benefit increases are a major cause of "uncontrollable" growth in Government spending and that if this growth in spending is to be checked, there must be some change in the indexing of entitlements.

Cost-of-living adjustments are usually justified on the ground that inflation robs annuities of their value over time; COLA automatically returns the annuity to its value at entitlement relative to a point on a standard measurement of price. However, an actual loss in purchasing power occurs in spite of adjustments. The mechanism for increasing annuities to the value initially held accomplishes its purpose after the fact. Inflation is dynamic; thus, between benefit adjustments price changes are continuing, but annuities are held constant until the next COLA. This lost purchasing power is not regained; the adjustment merely returns the annuity to its original value.

(a) The Administration's Fiscal Year 1983 Budget COLA Proposal

The Reagan administration, as part of its fiscal year 1983 budget, proposed to make fundamental changes in the method by which Federal annuities are adjusted for inflation. The proposal would have changed the automatic link between COLA and inflation. Instead of the full and automatic adjustment for CPI-measured price increases, the administration proposed to use the CPI index only if it showed a smaller percentage gain than salaries. It proposed to adjust annuities by that index which changed the least: wages or prices. This is known as indexing to the lesser of wages or prices (LWP). (The National Commission on Social Security Reform has recommended a similar approach for social security COLA beginning in 1988.) The LWP proposal raised two important points: (1) COLA no longer would be linked to the standard measurement of inflation, and (2) any method of adjustment that increases annuities at a rate different from the rate of price inflation in principle leads to potential changes in the annuitant's standard-of-living.

Under the present mechanism, the increase in annuities is linked directly to increases in consumer prices measured by the CPI. The CPI, to the extent feasible, measures price changes as they actually happen, and it is a widely accepted measure of consumer experience. By automatically adjusting annuities fully for CPI changes, the present adjustment mechanism forestalls arguments over what level any specific adjustment should be. For instance, the move to cap COLA at 4 percent was not based on research showing that 4 percent was an appropriate level of adjustment; rather the figure was accepted as a "fair" COLA based upon such considerations as the state of the economy, prevailing non-Federal practices, size of the Federal budget deficit, and changing political acceptance of Federal retirement COLA.

The Reagan proposal, by proposing to tie COLA to Federal salary increases in years when they fell short of CPI gains, would have given primary responsibility for such annuity adjustments to the executive branch. This is because the President has the authority to establish the annual general schedule (GS) salary increase (unless disapproved by Congress).

(b) Workers vs. Retirees in Hard Times

In spite of the clear and obvious rationale behind a CPI-based COLA, policy questions are raised by the concept of indexing, especially concerning the relative economic position of workers and retirees during economic cycles. Retirees, whose incomes are indexed to inflation, theoretically neither lose nor gain purchasing power. In theory, retirees are removed from the whims of economic cycles and neither share in increased consumer opportunities during times of strong economic growth nor share in losses during hard times. Yet, during economic declines, if Federal retirees are able to sustain their standard-of-living because of indexed benefits while the standard-of-living of workers deteriorates, each group's relative position in the marketplace changes. This change in relative marketplace position is an automatic result of CPI benefit indexing.

If, as the administration proposed, annuities were to be adjusted by the percentage gain which is lesser—wages or prices—retirees would share in the economic sacrifices brought on by hard times. Critics of the LWP indexing scheme argue that current retirees, unlike wage earners, have no chance to recapture the losses of downturns during upturns and that LWP indexing would permanently tie retirees' incomes to a new lower base relative to prices.

(c) Changes in 1982

Amendments to CSRS in recent years have reduced the cost of COLA by making them less frequent and by applying them to benefits on a selective basis. The administration's fiscal year 1984 budget proposes to suspend the COLA for 1 year, and make the 3-year limit applied to annuitants under age 62 a permanent change. Under current law, the limitation enacted in 1982 of one-half of specified COLA (for those under age 62) increases expires at the end of 1985. The administration's rationale for the elimination of the 1984 COLA is straightforward: the change affects all beneficiaries in the same manner and does not break the link with the CPI. The savings occur by holding checks constant at a lower amount for 1 additional year.

The rationale for the second change rests upon the notion that most CSRS and military retirees under age 62 are working at non-Federal jobs, or perhaps could be, given that the full retirement age in employment in the private sector is the earliest age of social security eligibility, age 62. In 1982 Congress addressed the question whether or not all retirees should receive full and automatic COLA. Adoption of a COLA limit to retirees under 62 suggests that those individuals who can reasonably be expected to have actually retired, should receive full COLA, but that younger individuals eligible for a pension should not necessarily receive the same treatment because most of them would be working at other jobs.

An implicit issue raised by this COLA restriction is the distinction between retirement and eligibility for a pension. The potential distinction is straightforward enough—an employee who ceases work because of old age or disability is retired; an employee who is eligible for a pension may receive it and work for another employer.

The problem is in determining whether such a distinction can be drawn between Federal annuities and retirement income provided by social security and other sources and received by non-Federal retirees. Certainly the history of CSRS suggests that the pension policy for Federal employees encompasses some of the aspects of a social insurance system as well as the features of a staff pension appropriate to long-term employment with one employer. While Federal employees are not covered by social security, CSRS pays benefits that are competitive with the retirement income of relatively generous pension plans integrated with social security.

However, a significant difference does exist between eligibility for Federal annuities and eligibility for social security benefits. The Federal Government generally pays CSRS benefits earlier and without regard to non-Federal employment after the pension begins. To receive full social security benefits a person must be older than 62 and actually retired; full benefits are contingent upon not earning more than a specified amount (or upon being older than 70). The eligibility age for an unreduced CSRS pension is 55 with 30 or more years of service. In some retirement systems employees become eligible for pensions much earlier. It is not uncommon for military retirement to occur under age 40. The CSRS pensions are paid as long as the eligible beneficiary does not return to work for the Federal Government; military retirees can work for the Federal Government and draw most and, in many cases, all of their military pension in addition to their civil service salary.

A proposal to apply full COLA only to the annuities of beneficiaries past a particular age would be consistent with a view that full and automatic inflation adjustments are a product of social policy and cannot properly be considered a provision within a pension plan. In this view, it is pointed out that fully adjusted retirement income is supported by the taxing power of the Federal Government and is possible only with that support. This view would suggest that social security is evidence of that policy—it is fully indexed annually—and that Federal retirement pensions, insofar as these pensions are supported by the taxing power of the Federal Government, could properly restrict full indexing to beneficiaries meeting criteria for similar protection from social security. Thus, the social policy itself could be supposed appropriate only for those who are presumed to be dependent upon public transfer payments during retirement, and could be contrasted to pension rights earned through service to the Federal Government as an employer.

Opponents of the move to deny a portion of the COLA to under age 62 retirees contend that the age distinction is unfair; that all Federal retirees should receive COLA pension adjustments on the same basis. Some point out that the change falls very heavily on military retirees and that because the pension for early retirement is an inducement to join and remain in the military, such a change is an unfair denial of an anticipated benefit on which career decisions have been based. Others point out that because of the change, a "notch" will exist between the benefits of retirees whose birthdays are before and after the date of adjustments. Still others argue that this change does not produce sufficient budget savings and that a specific COLA cap would save substantially more.

(C) Covering Federal Employment by Social Security

(1) INTRODUCTION

(a) Summary

Covered employment is employment in which earnings are taxed for social security and counted toward benefits which partially replace earnings lost because of old age, disability, or death. Currently, over 90 percent of the work force is in employment covered by social security. The major groups not covered include 2.5 million Federal civilian employees, about 3.8 million employees in State and local governments, and about 1.4 million workers in private, nonprofit organizations. (See table 13.) Employment in the railroad industry is also specifically excluded from coverage under the Social Security Act, although it can be shown that rail workers (about 450,000) are actually covered by social security either directly or indirectly, depending on their amount of rail service when they need social security protection. In addition to these groups, certain kinds of marginal employment are not covered either because the income level is insufficient to trigger coverage or because the type of employment is thought to be inappropriate for earning income insurance. Examples of these latter types of employment are newspaper vendors, students who work in their schools, and family members employed in the home.

Table 13.—SOCIAL SECURITY COVERAGE [1]

[In millions]

Occupational group	Number of employees	Covered	
		Number	Percent
Specifically exempt from coverage:			
Federal civilian employees	2.7	0.2	[2] 7.4
Voluntary coverage:			
State and local government	13.1	9.3	71.0
Nonprofit organization	6.5	5.1	78.5
Mandatorily covered:			
Industry and commerce	77.0	76.8	99.7
Farm [3]	2.0	1.5	75.0
Domestic [3]	1.9	.5	26.3
Self-employed [3]	8.6	6.5	75.6

[1] Estimates based on latest available data (1980). Estimates for some groups, such as nonprofit employees, are subject to error due to rapid turnover and the number of employees holding more than one job.

[2] Federal employees who are temporary or who work for quasi-Federal agencies such as the Tennessee Valley Authority (TVA) are covered.

[3] Mandatorily covered if special minimum coverage requirements met. Special minimum requirements for coverage generally relate to amount of wages earned—for example, domestic employees must receive at least $50 from one employer during a calendar quarter for those wages to be covered.

Source: Social Security Administration. Office of Research and Statistics.

Based on the best estimates available, approximately 7.7 million jobs would be added to social security if coverage were extended to all Federal civilian and State and local governments, and to private, nonprofit organization employees.

(b) Coverage of Federal Civilian Employment

If social security were extended to the Federal work force, most analysts and policymakers believe CSRS would need to be restructured to accommodate that coverage. The system could be designed to accommodate conventional pension objectives: decisions regarding plan features on retirement age, eligibility and benefit generosity are not restricted because of social security coverage. Nothing inherent in social security coverage need necessarily endanger current benefit rights for either retirees or active workers, and there would be no requirement that the Federal Government either save or spend additional amounts of money because of social security coverage of Federal workers. However, current benefit levels for all categories of workers cannot be maintained without spending additional money. Coverage of Federal employment raises distributional questions which cannot be avoided.

A redesigned CSRS and social security coverage arrangement could be limited to only newly hired employees, or it could include some, if not all, current workers. There is an advantage of limiting these changes to new workers only: for new workers, a redesigned CSRS would not effect major compensation changes after work under that compensation package had already been performed. It is possible to create incentives to join a new CSRS that might encourage substantial numbers of current employees to join voluntarily. Accrued benefit rights of current employees can be protected under either a mandatory or a voluntary extension of coverage to current workers. These rights could be partially redeemed immediately, transferred to the new system, or retained in the old system and at retirement combined with credits earned under the new system.

Because current benefit obligations from CSRS and social security would have to be met for Federal retirees whether or not mandatory social security coverage is enacted, coverage of Federal workers would have little net effect on the Federal budget for several years. The effect upon social security trust funds is a short-term cash flow advantage, as contributions would be made by, and in behalf of, workers who do not collect benefits until they reach retirement age. The magnitude of this revenue infusion for social security depends directly upon how many current workers are brought into the new arrangement. Any long-term effect depends upon the generosity of a restructured CSRS. The impact on individual beneficiaries varies, but income protection would generally increase for lower income workers and workers who leave Federal service without a benefit, or who become totally and permanently disabled, or who die and leave dependents. Conversely, lower benefits generally would go to higher income employees with lengthy Federal employment. Any losses might or might not be mitigated in the design of the system, its generosity, or in the addition of a voluntary incentive savings plan.

(2) PROBLEMS ARISING FROM THE EXISTENCE OF NONCOVERED EMPLOYMENT

(a) Summary

The existence of employment not covered by social security creates certain problems. It is obvious that most workers without any income protection at all would be better off covered by social security, especially if an unforeseen catastrophe prevented them from continuing to work. However, most workers without social security coverage are participants in staff retirement plans sponsored by their employers. Several undesirable consequences follow from the existence of employment not covered by social security but covered by staff retirement plans.

(b) Coverage Gaps

Some Federal employees may experience periods without income protection as they move between jobs covered and not covered by social security. These periods without income protection occur because both social security and CSRS require that employees work a specified period of time prior to becoming protected by disability, survivor, and certain other provisions of their respective programs. In addition, CSRS lacks some of the features of social security. Benefits for disability, survivors, and dependents are features of social security generally superior to similar provisions in CSRS. In addition, some Federal workers who pay into social security do not become eligible for any benefits because they do not work long enough under social security. These workers receive no return on their social security contributions. Some workers also leave Federal employment without retaining any pension rights, and could reach retirement age without an adequate source of retirement income. These first two consequences have been called coverage or benefit "gaps."

(c) Dual Entitlement ("Windfall Benefits")

The issue of dual entitlement for social security and CSRS provokes much of the controversy about the relationship between these two programs. Employees with careers split between Federal service and employment covered by social security often become eligible for benefits under both systems. There is nothing illegal or unethical about this. On the contrary, employees have no choice with regard to their participation in social security or CSRS (except for Members of Congress and their staffs), other than the initial choice to take a job covered by the respective program. The law requires their participation, and many have planned retirement on the basis of dual entitlement.

The problem arises because all employees who become eligible for social security with benefits based on less than full careers covered by the program receive favorably weighted benefits. Thus, it is not dual entitlement itself that creates problems, but the more advantageous terms under which workers with dual entitlement receive their social security benefits.

This advantage, is often called a "windfall." It is an unintended subsidy that occurs because, under social security, the benefit reflects career total wages covered by the program averaged over 35 years and is progressive. Those with low average wages receive a more generous benefit—one that "replaces" a larger percentage of covered career earnings. This higher replacement rate presumes that the lower income worker needs a higher percentage of his preretirement earnings than does someone with a higher career average wage. Thus, a worker with fewer years of social security coverage because of time spent in Federal employment can receive the higher replacement rate intended for long-term, low-paid workers. (Congress has enacted proposals to treat advantages created by dual entitlement without eliminating the opportunity to earn and receive benefits under both programs.) The administration's fiscal year 1984 budget endorses removing the advantages but does not offer any specific proposal. The cost of these "windfall" benefits has been estimated by the President's Commission on Social Security Reform to be about $200 million a year and rising. About 75 percent of Federal retirees will qualify for dual entitlements upon reaching the age of 62.

(3) FEDERAL CIVILIAN EMPLOYMENT

If social security were extended to Federal civilian employment, CSRS would probably be redesigned. There are three general ways in which CSRS could be changed to include social security coverage of Federal workers: (1) replicate, as nearly as possible, the current system; (2) replace the current system with a newly designed "defined benefit" system; and (3) replace the current system with a newly designed "defined contribution" system.

In all three cases, certain other changes to disability and survivor benefits might be required. Features not found in the current CSRS also might or might not be added. For instance, a plan to encourage employee savings, called a "thrift plan," could be provided using matching contributions as an incentive. Another important provision that might be added to a redesigned CSRS would permit separating employees to withdraw full pension rights in cash upon leaving Federal employment. Employees could be permitted to draw some vested pension rights before retirement and receive less in benefits when they actually retire. In all of these basic plan designs, it is possible to maintain retirement ages provided by the current CSRS for most retirees, and it is generally possible to continue the level of benefits currently available under CSRS for most retirees, particularly those with lower incomes, without additional costs to the Federal Government or to Federal workers.

(a) Federal Employees Covered Under Special Provisions

Some Federal employees covered by CSRS are covered by special provisions affecting eligibility, retirement age, benefit computation, and contribution rate. Examples of employees covered under special provisions include Federal law enforcement officers, firefighters, air traffic controllers, some employees of the legislative branch, and Members of Congress. In all of these cases, the plan design of a restructured CSRS could continue to acknowledge the unique circumstances of each group, and, as under the current plan, appropriate provisions could be designed for each.

(b) Federal Employees in Systems Other Than CSRS

There are numerous Federal retirement plans; CSRS is by far the largest, and most employees covered by other Federal pension plans, including the uniformed military service, are also covered by social security. The remaining Federal workers covered by neither CSRS nor social security are employees of the Foreign Service, the Federal Reserve Board, the Central Intelligence Agency (CIA) and all employees and judges within the judicial branch of the Federal Government. There may be reasons for continuing to exclude judges from participation, given the constitutional guarantee that Federal judges' salaries are continued for life. Congress might or might not include these other groups if an extension of coverage to CSRS participants is enacted. None of these other Federal retirement plans appear to present special problems that could not be resolved.

(c) Definition of Workers To Be Covered

Legislation extending social security to Federal employment would include a definition of which workers would be covered. A coverage initiative could include all current employees, only newly hired employees, or all new hires plus some subset of the current work force. In current discussions, age and service, or years of service until retirement are usually mentioned as criteria for determining any set of the current work force that would be covered.

Included in any definition of who is to be affected, is a determination of the rights of former workers, workers with breaks-in-service, new workers with military service, and returning workers who have withdrawn contributions from CSRS. In all of these cases, and in others in which credit under the old system is granted under the new system, full value of benefit rights under the current CSRS formula can be maintained and included in the benefit at retirement. As deemed appropriate, current workers could be given an option to join any new system, with full credit granted under the old system. Any costs or savings from granting such an option to current workers depend strictly upon the generosity of a restructured plan.

(d) Effect of Coverage Upon the Federal Budget

Coverage of Federal employment would have little immediate effect upon the Federal budget unless net contributions were altered. Outlays under current law for both social security and CSRS reflect benefit rights already being honored and would not change until service occurring after the date of enactment began to be included in benefit computations of individuals entering the rolls. Any change in total budget outlays in the future would reflect the generosity of a redesigned CSRS. The actual difference would be in the difference between combined social security and CSRS benefits that would be paid to aggregate future retirees under the new plan as opposed to present law. There is nothing inherent in redesigning CSRS to include social security coverage that necessarily raises or lowers aggregate Federal outlays to retired Federal employees.

There could be some change in total Federal budget revenues. Any change in total revenues would be equal to the aggregate difference in contributions made by Federal employees to CSRS and social security under the new plan as opposed to current law. For instance, Federal workers, with few exceptions, pay 7 percent of their total salary to CSRS; 1 out of every 15 also contributes to social security through a second job. As of January 1, 1983, Federal workers also began to pay the hospital insurance (medicare) tax of 1.3 percent up to a maximum salary base ($35,700 for 1983). If coverage were extended to these workers each would begin to pay the social security tax of 6.7 percent (which includes medicare) up to the maximum taxable amount. In addition, depending upon the design of CSRS, some contributions could be made by these employees to CSRS. If mandatory contributions to a new CSRS were required, additional budget revenue would result. Many proposals, however, call for a CSRS paid entirely by the Federal Government with the possible addition of an incentive savings plan (thrift plan).

Assuming a noncontributory CSRS with a voluntary thrift plan, the aggregate change would be the difference between present contributions to CSRS and social security under current law, and future payments to social security plus any contributions to the thrift plan by participating employees. The amount of the change would reflect the participation rate and level for the thrift plan, and of course, these variables would also be directly dependent on the speed of transition—the rate at which the percentage of the work force participating in the new system increases and the old decreases.

Ultimately, the long-term effect on the budget of changing Federal retirement to include social security coverage is strictly a matter of the change in total generosity of benefits netted against any change in total revenues. The CSRS portion of the Federal retirement configuration would drop for individuals and as an aggregate expenditure of the Federal Government. Seventy-five percent of CSRS beneficiaries eventually also draw social security; that percentage would rise to 100 percent. The average amount received by each from social security would also increase. With the elimination of "windfall" advantages, and because average Federal salaries are higher than average salaries throughout the social security program, Federal workers as an aggregate would receive less benefits relative to taxes paid than the average social security participant. Thus, coverage of Federal employment is projected to have a long-run positive effect on social security equal to 0.28 percent of total social security covered payroll.

It is important to understand that although the social security trust funds are improved by covering Federal workers in the near-term, the change does not necessarily increase the Federal Government's revenues and thus its capacity to finance social security. There are basically three possible methods of improving the financing of the social security trust funds: payroll tax increases, benefit reductions, or new source of revenue. Coverage of Federal workers, while a new source of revenue to social security, does not actually change the relationship between Government outlays and taxpayers. Under most coverage designs, employee contributions currently going to the civil service retirement fund would be redirected to social security; the employer's share of the social security tax would likewise come from within the Federal budget. While these are new revenue sources for social security they do not constitute much in the way of additional revenue to the unified Federal budget.

If mandatory social security coverage of Federal employees were motivated in part by the desire to improve the financing of the social security system, then it could diminish any perception that other means are needed to strengthen the social security system which would increase Federal revenue (e.g., through a payroll tax increase) or reduce Federal expenditures (e.g., through benefit deliberalizations). These alternatives would affect the Federal deficit (or surplus, if it existed). Although different in form, because the net budget effect is so small, unless employees are required to contribute higher amounts, coverage of Federal employment has the same implications for short-term Federal fiscal policy as any other direct general fund payment to social security—it does not bring additional revenues into the Federal Government, nor does it cause additional expenditures, and it therefore does not affect a Federal budget deficit.

(e) Effects of Coverage Upon the Federal Work Force

Finally, the effect of the social security coverage on the Federal work force would depend on the design and generosity of a CSRS after coverage began, but would generally redistribute expenditures among certain categories of Federal workers and retirees. Distribution under any redesigned CSRS would change in favor of: (1) workers with short Federal careers who, under the current CSRS, would either receive no benefit or a benefit deferred several years to retirement; (2) workers who became totally and permanently disabled during their Federal careers; and (3) spouses and other dependents of most deceased Federal workers and retirees. These redistribution aspects of any CSRS and social security design follow from the structure of social security, i.e., the benefit portability and social insurance features of the program, and from the restrictive vesting requirements under CSRS.

Under nearly all designs, redistribution of Federal retirement dollars would disfavor: (1) retirees with long Federal careers at higher incomes, especially retirees who also qualify for social security benefits; (2) workers who complete second careers with the Federal Government after having spent considerable time in non-Federal employment; and (3) workers with rapid promotions to higher grades fairly late in their careers. The benefit loss to these individuals is, in part, a result of eliminating windfall opportunities from social security, but also follows from ending the advantages received by the aforementioned groups under the present CSRS structure. Currently, CSRS rewards high incomes, long service, late career service, and late career promotions.

It is important to note, however, that the extent of these income redistribution features could be reduced, if desired, in a redesign of CSRS. For instance, a new Federal retirement program combining social security and a restructured CSRS could be designed with overall costs approximately the same aggregate amount as the cost of current benefits received from both programs by Federal retirees. First, any particularly attractive features of the current program such as early retirement and full COLA could be retained within a "constant cost" constraint, although some overall benefit levels would have to be reduced. Second, the contribution level could be roughly the same as the current employee obligation (although it need not be). Third, such a program would spread Federal compensation dollars to a wider group than now receive them. Fourth, the advantages and costs of any redistribution can be assigned intentionally to improve benefits to any group considered to be at a disadvantage under the current arrangement, and this can be done at the expense of any other specific groups identified as having too generous an advantage under the current structure. Fifth, the design can reflect a personnel objective to encourage long careers by rewarding long service more than short service, or could encourage employee flexibility and easy movement in and out of Federal employment. Finally, the design itself could exercise fairly explicit control over relative changes in treatment or the design could introduce a fairly substantial element of individual employee responsibility into the determination of where each such individual would be in relative distribution at the point of retirement.

Chapter VI

Cost and Benefit Issues in the Military Retirement System

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COST AND BENEFIT ISSUES IN THE MILITARY RETIREMENT SYSTEM

INTRODUCTION

The military retirement system covers members of the Regular and Reserve components and consists of three major elements: nondisability retirement, disability retirement, and survivor benefits for eligible survivors of deceased retirees. In fiscal year 1983, expenditures to pay retired pay and survivor annuities to approximately 1.4 million recipients will amount to about $16.4 billion; outlays for fiscal year 1984 will amount to about $17 billion.

A serviceman becomes entitled to military retirement benefits when he completes 20 years of service. A member who retires from active duty is paid an immediate annuity based on a percentage of the monthly basic pay (exclusive of other allowances and special pays) he is receiving immediately before he retires (final basic pay). His retired pay is computed at the rate of 2.5 percent of his final basic pay for each year of service. The minimum amount of retired pay to which he is entitled is 50 percent of his final basic pay (e.g., 20 x 2.5 percent); the maximum, fixed by law and equated to 30 years of service, is 75 percent.

Retired pay and survivor annuities are protected against inflation. The current permanent statutory mechanism requires annual cost-of-living adjustments based on the percentage rise in the consumer price index for the previous calendar year.

The military retirement system is funded entirely from general revenues. Each fiscal year Congress appropriates sufficient funds to cover the cost of retired pay and survivor annuities for that year. A serviceman does not contribute toward his future military retirement annuity; however, if he retires and elects survivor benefit coverage, his retired pay is reduced by an amount specified by the coverage chosen. Such deductions are estimated to defray about 70 percent of the cost of the survivor benefit plan.

Military personnel also are entitled to social security benefits from their military service and have been paying social security taxes since 1957. Annuities from the two systems are not integrated; that is, social security benefits are paid to military retirees in addition to their retired pay. (This report does not analyze the consequences for military retirees of their social security benefits. The discussion of reform proposals, however, does refer to recommendations for integrating the two benefits.)

As its cost has grown, so has criticism of the system. Its total cost in fiscal year 1960 was $693 million, amounting to about 2 percent of total Defense Department outlays; the annual per capita annuity was about $2,365. In fiscal year 1983, the system will cost over $16 billion and account for 7.5 to 8 percent of total Pentagon outlays. The annual per capita annuity will be about $11,515. If the administration's 5-year defense spending plan as projected in the fiscal year 1983 budget stays on track, military retirement's share of total DOD outlays in fiscal year 1987 will be about 6.1 percent. In absolute terms, however, retirement outlays are projected to increase about 32 percent over fiscal year 1983 outlays.

According to valuations prepared on October 11, 1982, by the Department of Defense, the Federal Government's liability to pay retirement benefits to current beneficiaries and members in active service is $668 billion. This estimate is based on the Department's "most likely" economic forecast. Such forecasts, of course, are sensitive to judgments about future trends in the U.S. economy and in military manpower levels. A more optimistic economic forecast using the same manpower levels predicts that the liability would be $552 billion; a more pessimistic forecast projects a liability of $750 billion.

The Department's present valuation of future benefits under its "most likely" economic scenario indicates that an amount equal to 51.1 percent of the total cost of basic pay would have to be placed annually in a fund and accrued at interest to pay future retirement benefits to those members in active service who serve long enough to retire. (The Department estimates that 35 percent of a cohort of new officer accessions and 12 percent of a cohort new enlisted accession serve long enough to retire.) If such a fund were established, the Government's remaining unfunded liability would be $539 billion, which compares to $668 billion under the current pay-as-you-go financing policy.

Thus, the Federal Government already has a substantial liability for past defense and if the United States continues to maintain force levels in the range of 3 million members on active duty and in the Reserve components, a substantial part of the cost for current defense will be in future retirement benefits. Concern over the cost of the military retirement system has produced a number of studies recommending broad changes to its benefit structure. Each study promised savings without degrading the quality of military manpower. For a variety of reasons, these proposals failed to get strong supporting constituencies either in the executive branch or the Congress.

In recent years a number of laws have been enacted to restrain the cost of Federal retirement programs including military retirement. These laws have been directed chiefly at cost-of-living adjustments (COLA) in the annuities of current retirees. The Omnibus Reconciliation Act of 1982, the latest of these laws, restrains the cost of COLA's for fiscal years 1983, 1984, and 1985, by spacing them 13 months apart and capping COLA's for nondisabled retirees under age 62. In conjunction with the fiscal year 1984 budget, the administration proposes to suspend a cost-of-living increase in fiscal year 1984 and limit COLA's for nondisabled retirees under age 62 to one-half the full COLA authorized retirees age 62 and older.

Critics of the present system contend that its benefits are too generous compared to most other private and public retirement plans. For example, news accounts indicate that a draft report for President Reagan's Private Sector Survey on Cost Control, the most recent review of military retirement, concluded that the system has "five times better benefits and five times higher costs than the better private sector plans."

Critics argue that the current benefit structure does not encourage members to remain in active service once they become eligible for retirement. They contend that the 20-year retirement entitlement, coupled with the prospect of an attractive income from retired pay and a second career, is a powerful incentive to leave military service, particularly for persons with marketable civilian skills. They also contend that up-or-out policies indiscriminately force highly qualified and experienced members to retire when they complete 20 years of service regardless of their value to the military services. Many believe that the combination of up-or-out policies and 20-year retirement better serves career advancement opportunities than the public interest.

The military services stoutly defend the current retirement system, arguing that it has evolved from past experiences when the Nation found its military leadership incapable of fighting the "next war." The combination of up-or-out policies and 20-year retirement has been instrumental in producing the quality of forces and leadership not only ready to fight the "next war," but also to carry out demanding peacetime missions in a tension-ridden world. They aver that the system is a time-tested and cost-effective tool for good force management. Cost-saving changes in the current benefit structure, they warn, would be offset, to a large degree, by the cost of other inducements that would be required to retain quality personnel. Proponents of the present system strongly imply that radical change ultimately would be detrimental to national security.

This chapter provides the uninitiated reader with an overview of the military retirement system—its elements, its cost, proposals to revise its structure, and some of the principal arguments for and against changing its structure. It does not suggest specific options for changing the structure of the system; however, it provides detailed summaries of recommendations from past studies of the system that are still relevant today.

BACKGROUND AND CURRENT STATUS OF MILITARY RETIREMENT

(A) Synopsis of Pertinent Military Retirement Legislation

Before 1855, a military officer could remain in active service until he died. Only dismissal or resignation could terminate his service. The military retirement system grew out of the need to remove officers from active service because of physical or mental infirmity.

The first law permitting incapacitated officers to be removed from active service dates to 1855. While not a retirement law per se, it authorized the Secretary of the Navy to remove any Navy officer judged incapable of performing his duty and to place him on a "reserved list." Significantly, the act also permitted the officer to continue to receive part of his active duty pay unless the incapacity was considered his fault, in which case he was dropped from the rolls altogether without pay.

The first law authorizing the retirement of military personnel was enacted on August 3, 1861, shortly after the outbreak of the Civil War. Congress provided this grant of authority in order to retire officers of the Army, Navy, and Marine Corps who were either too old or otherwise too incapacitated for the rigors of wartime service. It also served to facilitate the advancement of younger officers. The act permitted officers to be retired through two methods: an officer with at least 40 years of service could apply for retirement, or the President could retire any officer judged physically incapable of performing his duties. Thus the 1861 act stands as the first voluntary retirement authority as well as the first disability retirement authority for military personnel.

Since 1861, Congress periodically has passed retirement laws in response to specific needs, thereby leading to the current structure of the military retirement system. Today, this system is said to serve at least these purposes: (1) to sustain a "young and vigorous" military force; (2) to keep promotion opportunities open; (3) to motivate persons toward military careers; and (4) to provide some post-service economic security. The fundamental purpose of the military retirement system, however, is to support the overarching objective of manning the military services with persons capable of performing modern peacetime and wartime missions.

(1) NONDISABILITY RETIREMENT

The application of laws governing retirement of active duty personnel for age or years of service—i.e., nondisability retirement—

evolved unevenly among the services. In 1870, Congress reduced the minimum service needed by Army and Marine Corps officers to apply for voluntary retirement to 30 years. Navy officers were not granted the same entitlement until 1908.

Enlisted personnel were first granted entitlement to apply for voluntary retirement in 1885, some 24 years after officers were granted this entitlement. This Act applied only to Army and Marine Corps enlisted personnel, allowing them to apply for voluntary retirement after 30 years of service. A similar entitlement was extended to Navy enlisted personnel in 1899.

In 1915, responding to the Navy's need to encourage longer service, Congress passed legislation allowing Navy enlisted personnel with at least 16 or 20 or more years of service to transfer to the Naval Reserve and receive a portion of their active duty pay. This law dates as the forerunner of the 20-year retirement authority. The 20-year retirement privilege was extended to Army enlisted personnel some 30 years later in 1945 to equalize retirement benefits and aid in recruiting and retention.

The first 20-year retirement authority for officers, enacted in 1938, permitted line officers of the Navy to apply for retirement from active duty if they had at least 20 years of *commissioned* service. This authority was intended to improve promotion opportunity for younger officers by encouraging officers who had entered the Navy in World War I to retire. In 1946, the authority was liberalized to allow Navy and Marine Corps officers *with at least 10 years of commissioned service* and 20 years of total military service to retire in their commissioned grades.

This provision—and others—of the 1946 act was intended to help the Navy's postwar transition and to improve promotion opportunity by encouraging senior officers who had served in World War II to retire. This action was considered necessary because the Navy's up-or-out promotion and retirement laws had been suspended during the war. Army and Air Force officers were granted the same entitlement in 1948 in order to equalize retirement benefits. (A prior 1935 act, intended to help alleviate a promotion problem in the Army caused by "hump" of World War I officers, allowed Regular Army officers with as little as 15 years of service to apply for retirement.) The "20 and 10" authority still stands today.

Other laws have been enacted that grant the military departments authority to retire officers without their consent for reasons other than disability or for cause. Similar laws for enlisted personnel have not been enacted because their tenure is managed through enlistment and reenlistment policies.

Before 1916, the only mandatory nondisability retirement authority for officers was for age—in this instance, age 64. The first law to link a systematic up-or-out officer promotion-by-selection process and mandatory nondisability retirement as an integral part of that process was enacted in 1916. This landmark legislation applied only to Regular line officers of the Navy and was intended to prevent promotion stagnation and improve efficiency in the officer corps.

The Army did not seek a parallel up-or-out promotion and retirement scheme until after World War II. At that time, the Army's proposal was coupled with concurrent proposals refining the Navy's promotion system, and the combined legislation was enacted in the Officer Personnel Act of 1947. The 1947 act left certain procedural differences between the Army and Air Force on the one hand (the Army Air Corps became the Air Force in 1947) and the Navy and Marine Corps on the other. But over time, these differences have been almost entirely eradicated.

The first laws governing nondisability retirement for members of the Reserve components (i.e., National Guard and Reserve components of each of the military services) for other than full-time active service were enacted in 1948 under title III of the Army and Air Force Vitalization and Retirement Equalization Act of 1948. These laws, which have remained basically unchanged since their enactment, apply to reservists who earn retirement entitlement for service in an active Reserve status. Essentially, the laws applicable to nondisability "title III" retirement form a system similar to that applying to members serving in the active forces.

(2) DISABILITY RETIREMENT

The previously mentioned 1861 act, which applied only to Regular officers, set the basic standards for disability retirement until they were revised by the Career Compensation Act of 1949.

The first law authorizing enlisted personnel to be retired for disability reasons was enacted in 1867. This act permitted disabled enlisted members of the Navy and Marine Corps with at least 20 years of service to receive one-half of their active duty pay "in lieu of being provided a home in the navy asylum." Similar entitlement for Army enlisted personnel was not enacted until 1941.

The reforms in disability retirement procedures embodied in the Career Compensation Act of 1949 were the result of charges of inefficiencies and unfairness in then prevailing procedures. Current disability retirement laws, which apply to all officer and enlisted personnel, Regular and members of the Reserve components as well, date from the 1949 act.

(3) RETIRED PAY

The general principle of computing the amount of retired pay based on a percentage of active duty pay was first established by the appropriations acts for the Army and Navy in 1870. Retired pay for an Army or Marine Corps officer was fixed at 75 percent of his active duty pay, exclusive of all other pays and allowances, for the grade in which he retired. A Navy officer was paid retired pay in an amount equal to 50 percent of the highest sea duty pay for the grade which he held on the retired list. The latter rate was increased to 75 percent in 1873.

The 1916 act, establishing an up-or-out promotion system for Navy officers, was the first to authorize retired pay to be computed on the basis of 2.5 percent of basic pay for each year of service not to exceed 30 years. This formula is the standard today.

With certain exceptions, the laws periodically enacted before 1958 to raise active duty pay rates also allowed recomputation of retired pay rates based on the new pay scales. The pay raise authorized in 1958, which provided substantial pay raises to senior personnel, marked the end of recomputation. Instead of allowing retired pay rates to be recomputed, retirees were given a 6-percent across-the-board cost-of-living increase. The Uniform Services Pay Act of 1963 subsequently authorized automatic increases in retired pay based on increases in the Consumer Price Index. Although there have been subsequent procedural modifications, this linkage has been the basis for increasing retired pay ever since the 1963 act.

(B) The Major Elements of the Military Retirement System

The military retirement system covers members of the Regular and Reserve components and their surviving dependents. It consists of three major elements: disability retirement, nondisability retirement, and survivor benefits for dependents of deceased personnel. Expenditures for these three elements will total about $16.4 billion in fiscal year 1983. This section describes each element in order of its share of the total cost.

(1) NONDISABILITY RETIREMENT

Nondisability retirement is by far the largest element of the military retirement system. Department of Defense (DOD) projections show that 1.2 million retirees—89 percent of those receiving retired pay—will be receiving nondisability retired pay by September 30, 1983. Estimated expenditures for nondisability retired pay in fiscal year 1983 will be about $14.5 billion, or about 88 percent of estimated total expenditures for the military retirement system.

Nondisability retired pay is paid to a member who retires voluntarily or is retired as a result of law or policy for reasons other than physical disability. Initial entitlement to nondisability retired pay accrues to a member after 20 years of service. A member who retires from active duty begins receiving retired pay immediately following retirement. A reservist whose entitlement to retired pay is based on point-earning activities in a Reserve component of a military service, begins receiving retired pay at age 60. Table 1 summarizes the major features of nondisability retirement as prescribed in title 10, United States Code.

In general, nondisability retired pay for a member who retires from active duty is a percentage of the *basic* pay (exclusive of allowances and special pays) he is receiving immediately before he retires (final basic pay). This is an important distinction that is often misunderstood. Military personnel are paid a variety of allowances (e.g., basic allowance for quarters) and special pays (e.g.,

Table 1.— MAJOR FEATURES OF

	Active-duty Service
Voluntary retirement	All grades (Regular and Reserves on active duty) Completion of 20 years of active service on approval of Secretary of Military Department. Officers in grades above warrant officer To be retired in a grade above warrant officer, an officer also must have at least 10 years of active commissioned service.
Mandatory retirement	Regular officers For age: 62. An officer in temporary grade 0-9 or 0-10 may be deferred to age 64. No more than 10 can be in such status at any one time. For years of service grade — years of service 0-8 — 35 and 5 years in grade 0-7 — 30 and 5 years in grade 0-6 — 30 0-5 — 28 (Retirement of selected officers in the above grades may be deferred up to 5 years.) WOs — 30 For early retirement: When the needs of a service require, officers in grades 0-5, 0-6, 0-7 and 0-8 may be selected, in limited numbers, for retirement before completing the normal years of service shown above. For promotion failure: An officer in grade 0-2, 0-3 or 0-4 who twice fails selection for promotion to the next grade must be discharged or, if eligible, retired. If in grade 0-3 or 0-4, may be selected for continued service not to exceed a total of 20 or 24 years of active commissioned service, respectively. Warrant officers who twice fail of promotion to the next higher warrant officer grade must be discharged or, if eligible, retired.
Retired pay	Paid immediately. 2.5 percent of a member's basic pay for each year of service. Retired pay may not be less than 50% nor more than 75% of basic pay.

NONDISABILITY RETIREMENT

Reserve Service

All grades

Completion of 20 years of creditable service. Each year in which a member accrues at least 50 points (attending active duty for training, non-active duty training drills, etc.) counts as a creditable year for retirement.

Reserve officers

For age

Army/Air Force: 64, Chief of National Guard Bureau and state adjutants general. 62, grades 0-6, 0-7, 0-8 & WOs. 60, all other grades.

Navy/Marine Corps: 62, all grades. An officer in grade 0-6, 0-7 or 0-8 may be deferred to age 64. No more than 10 can be in a such status at one time.

For years of service

All services: 0-8, 35 and 5 years in grade. 0-7, 30 and 5 years in grade

Army/Air Force: 0-6, 30 and 5 years in grade. Grades 0-2 through 0-5, 28.

Navy/Marine Corps: See section on promotion failure.

For promotion failure

All services: An officer in grade 0-2, 0-3 or 0-4 who twice fails selection for promotion to the next higher grade must be transferred to Retired Reserve or, if not eligible for or does not apply for transfer, be discharged.

Navy/Marine Corps: An officer in grade 0-5 or 0-6 who twice fails selection for promotion to the next grade must be transferred to the Retired Reserve or, if not eligible for or does not apply for transfer, be discharged. (In general, Navy promotion policy works to limit maximum service of an 0-6 to 30 years, an 0-5 to 26 years, and an 0-4 to 20 years.)

Paid at age 60. 2.5 percent of basic pay (at rates in in effect when member is age 60) of a member's retired grade for each year of creditable service. Creditable service = total points - 360. Retired pay may be less than 50% but not more than 75% of basic pay.

Legend: Temporary grades: 0-10, General/Admiral; 0-9 Lt. Gen./Admiral (These grades are designated for key positions. Retirement for service is based on permanent grade held.)

Permanent grades: 0-8, Maj. Gen./Rear Adm.; 0-7, Brig. Gen./Commodore; 0-6 Col./Capt.; 0-5, Lt. Col./Commander; 0-4, Maj./Ly. Cmdr.; 0-3, Capt./Lt.; 0-2, 1st Lt./Ensign (j.g.)

parachutist pay, submarine duty pay, aviation career pay) that do not enter into the computation of retired pay.

The statutory formula provides that retired pay is computed at a flat rate of 2.5 percent of final basic pay for each year served. For example, the retired pay of a member who retires with 20 years of service will be 50 percent (20 × 2.5 percent=50 percent) of his final basic pay. A member who retires from active duty is entitled to a minimum of 50 percent and a maximum of 75 percent of his final basic pay. So-called "look-back" provisions in existing law allow exceptions to this general rule. "Look-back" provisions preclude a member from being entitled to less retired pay on the date he retires than he would have been receiving on that date as the result of retired pay cost-of-living increases he would have received had he retired at some earlier date. (Refer to page 356 for a discussion of "look-back.")

Nondisability retired pay for a reservist whose retired pay is based on point-earning activities is computed differently, although the standard formula (2.5 percent of basic pay for each year of service) applies. The base for computing retired pay is the rate of basic pay in effect when a reservist reaches age 60, rather than his final basic pay. A reservist's years of creditable service is calculated by dividing the total points he has earned (e.g., one point for each day of active duty (for training), one point for each drill period) by 360. Following this computation, retired pay is calculated in the same manner as described above for active duty personnel.

In fiscal year 1982, monthly per capita nondisability retired pay was about $945 or $11,340 annually. This average, however, masks wide differences among various categories of nondisability retirees, as shown in table 2.

Table 2.—EXAMPLES OF PER CAPITA NONDISABILITY RETIRED PAY IN FISCAL YEAR 1982 [1]

Category	Per month	Per year
Officers in grades above warrant officer including reservists [2]	$1,460	$17,520
Officers in grades above warrant officer excluding reservists [2]	1,800	21,600
Enlisted, including reservists [2]	735	8,820
Enlisted, excluding reservists [2]	745	8,940
Reserve officers in grades above warrant officer [2]	630	8,160
Reserve enlisted [2]	370	4,440

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[1] Amounts shown were derived by CRS from a report by the Office of the Actuary, Department of Defense, at page 147 (Number of Military Personnel Receiving Retired Pay as of September 30, 1981, by Rank and Average Gross/Nets) entitled, "FY 1981 DOE Statistical Report on the Military Retirement System (RCS No. DDM(A) 1375)".

[2] Reserve personnel receiving retired pay based on point-earning activites.

Table 3 provides examples of the lifetime value of nondisability retired pay for members retiring in fiscal year 1983.

Table 3.—EXAMPLES OF LIFETIME VALUE OF NONDISABILITY RETIRED PAY AT TIME OF RETIREMENT FOR MEMBERS RETIRING FROM ACTIVE DUTY

Retired grade	Years of service	
	20	30
O-6 (colonel/captain)	$560,100	$745,097
O-4 (major/lieutenant commander)	438,524	508,384
E-9 (sergeant major or equivalent)	302,745	403,018
E-7 (master sergeant or equivalent)	234,174	323,821

NOTE.—Amounts are in fiscal year 1983 dollars and represent the amount of money needed in a fund invested in long-term Government bonds and securities at the time the member retires in order to pay a lifetime annuity that increases annually with inflation.

Assumes service for pay and active service are equal. Assumes entry age of 23 for officers and 20 for enlisted.

Source: Department of Defense, Office of the Actuary.

(2) DISABILITY RETIRED PAY

Disability retired pay will cost about $1.4 billion in fiscal year 1983, amounting to 8.5 percent of the total cost of the military retirement system.

A member may be retired and paid disability retired pay if he is found unfit for duty because of a physical disability. The disability must not be the result of intentional misconduct or willful negligence, nor incurred during an unauthorized leave of absence. A member also must have either 20 or more years of service or a disability rated at 30 percent or more under standard rating schedules used by the Veterans Administration. A disabled member who has less than 20 years of service and less than a 30-percent disability is separated with separation pay.

A member who has a potentially permanent disability may be placed on the temporary disability retired list (TDRL) for up to 5 years. While on the TDRL, a member must undergo periodic examinations to determine whether or not he should be returned to active service or retired.

Disability retired pay may be computed one of two ways, whichever is the most beneficial to the member: (1) 2.5 percent of a member's basic pay for each year of service, or (2) his basic pay times the percentage of his disability. Disability retired pay may not exceed 75 percent of basic pay and "look-back" provisions apply. Retired pay for a member on the TDRL is computed in a similar manner.

In fiscal year 1982, the monthly per capita amount of permanent disability retired pay (excluding members on the TDRL) was approximately $780; the average for officers, including warrant officers, was about $1,260 a month and for enlisted persons, about $490 a month.

(3) Survivor Benefits

In fiscal year 1983, this element will cost about $454 million—about 2.8 percent of the total cost of the system—to pay annuities to survivors of deceased retirees and indemnity compensation to survivors of military personnel who died while in active service. About 5 percent of the cost of this element is for indemnity compensation.

A member may elect to provide part of his retired pay to a designated beneficiary after his death. As defined by the survivor benefit plan (SBP), a beneficiary may be a spouse, former spouse, dependent child, or a person with an insurable interest in the member. The monthly annuity may be as little as $300 or as much as 55 percent of a member's retired pay. The retired pay of a member participating in SBP is reduced by an amount determined by the chosen coverage. Such deductions defray an estimated 70 percent of the cost of SBP.

Annuities for survivors of deceased military retirees are paid under the SBP as well as its forerunner, the Retired Serviceman's Family Protection Plan. In fiscal year 1982, the average monthly annuity, including indemnity compensation, was about $426.

COST OF THE MILITARY RETIREMENT SYSTEM

This section discusses past and future trends in the cost of the military retirement system. Future costs are based on 75-year projections—fiscal year 1983 through fiscal year 2057—prepared as of October 11, 1982, by the Defense Department at the request of CRS. Historical data beginning from fiscal year 1960 are provided to show trends and to make comparisons.

The projections show a low-, middle-, and high-cost range based on three different assumptions about military pay raises, cost-of-living adjustments (COLA) in retired pay and survivor annuities, interest rates, and mortality improvement rates developed by the Social Security Administration. The low range is based on the intermediate II-B economic assumptions used by the Social Security Administration for its fiscal year 1982 trustee's report. The other two projections are based on DOD's economic assumptions and provide a middle or "most likely" cost forecast and a high or "pessimistic" forecast. A summary of the various assumptions are contained in table 4.

Each projection uses straight-line force strengths at current levels—about 2.1 million for the active forces and 900,000 for the Reserve forces.

Table 4.—ASSUMPTIONS USED IN COST PROJECTIONS

[Fiscal years; in percent]

Assumption	Intermediate II-B		Most likely		Pessimistic	
	Pay	COLA	Pay	COLA	Pay	COLA
Mortality improvement rates	(1)	(1)	(1)	(1)	(2)	(2)
Long-term interest rates	(3)	(3)	6.0	6.0	6.75	6.75
Annual pay raises and COLA's:						
1983	4.0	7.9	4.0	6.6	4.0	7.0
1984	8.1	7.4	6.2	7.2	6.8	8.0
1985	6.9	6.6	6.0	6.6	6.4	7.0
1986	6.8	5.8	5.5	6.0	6.4	6.5
1987	6.6	5.5	5.5	5.7	6.4	6.0
1988	6.6	5.3	5.5	5.5	6.4	6.0
1989	6.4	4.9	5.5	5.4	6.4	6.0
1990	6.0	4.5	5.5	5.0	6.4	6.0
1991 on	5.5	4.0	5.5	5.0	6.4	6.0

[1] Intermediate.

[2] Pessimistic.

[3] 6.1–13.0

(A) Past and Projected Numbers of Beneficiaries

There are currently about 1.4 million annuitants in the military retirement system: 1.3 million disability and nondisability retirees and about 89,000 survivor annuitants. This large population stems, of course, from U.S. policy, dating from the beginning of the Korean war, to maintain large-standing military forces.

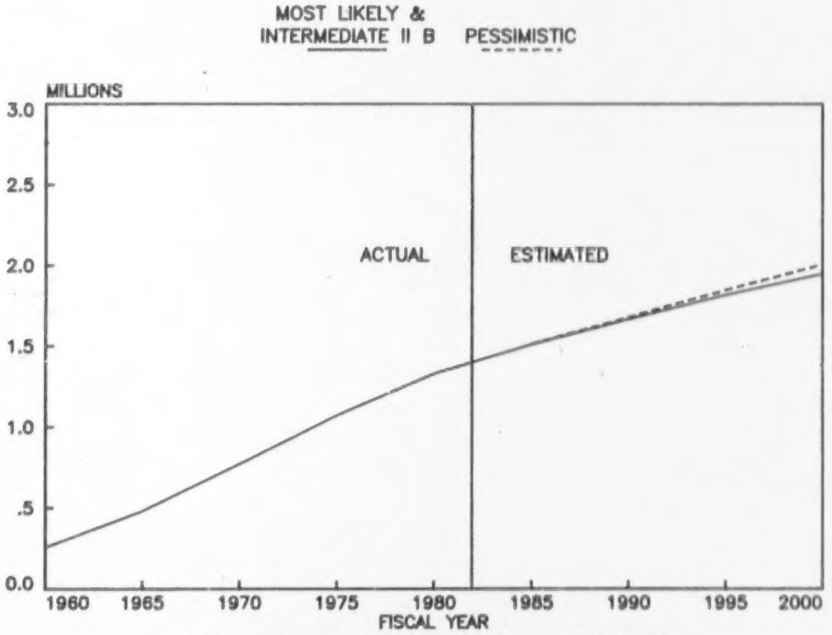
From fiscal year 1960 to fiscal year 1980, the total number of beneficiaries grew 447 percent, from 256,000 to 1.4 million. (See fig. 1, below.) During this 20-year period, the number of nondisability retirees increased 563 percent. This explosive growth was caused by the retirement of thousands of World War II veterans, the majority of whom were recalled for the Korean war and remained on active duty for the cold war, along with others who initially joined the military services during the 1950's. From fiscal year 1967 to fiscal year 1976, the number of nondisability and disability retirements averaged over 70,000 per year, reaching a peak of nearly 81,000 in fiscal year 1971.

FIGURE 1.

TOTAL NUMBER OF MILITARY RETIREES AND SURVIVOR ANNUITANTS *

FY 1960 – FY 2000

END FISCAL YEAR



Source: Department of Defense, Office of the Actuary
*Date of projection – October 11, 1982

The fiscal year 1960 to fiscal year 1980 period also saw a 2,700-percent growth in survivor annuitants. This element of the military retirement system, however, was in its startup phase in fiscal year 1960, the first law permitting members to allocate part of their retired pay to their survivors having been enacted only 7 years earlier.

For the long term the DOD projections forecast relatively moderate growth in the retiree population compared to that experienced for the fiscal year 1960 to fiscal year 1980 period. It is significant to note that the projections do not show any peaking in total numbers, which is due primarily to continued mortality improvements. The number of survivor annuitants, however, is forecast to peak around fiscal year 2011 or fiscal year 2018, depending on the scenario, and then to decline moderately.

For the current 20-year period, fiscal year 1980 to fiscal year 2000, the projections indicate that the number of retirees and survivor annuitants will increase between 46 to 51 percent. By fiscal year 2000, the number of retirees and survivor annuitants will approximate 2 million, almost duplicating the size of the active duty forces today. The number of survivor annuitants is expected to grow at the fastest pace: from about 66,000 to around 221,000 to 223,000—a 235- to 238-percent increase.

The projections indicate the net growth in total number of recipients from fiscal year 1980 to fiscal year 2057 will range from 65 percent to 84 percent.

Obviously, sustained increases or decreases in military manpower in substantial numbers would move these population projections upwards or downwards. But such changes would not significantly affect the number of recipients projected through fiscal year 2000 because it includes current beneficiaries and retirees who entered military service in the 1950's, 1960's, and 1970's.

(B) Past and Projected Costs of the Military Retirement System

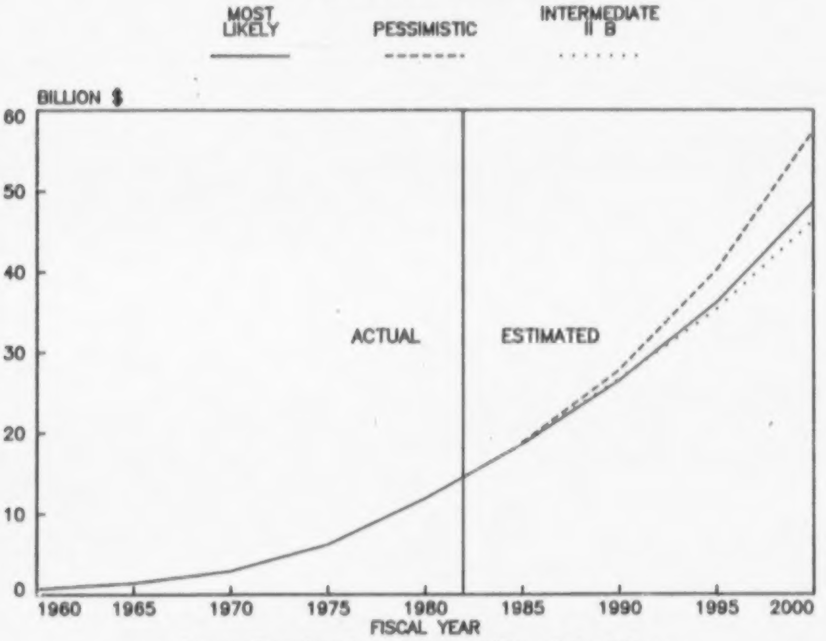
Figure 2 on page 348 shows past and projected trends in the total cost of the military retirement system in then-year dollars from fiscal year 1960 through fiscal year 2000.

FIGURE 2.

TOTAL ANNUAL COST OF THE MILITARY RETIREMENT SYSTEM *

FY 1960 – FY 2000

IN BILLIONS OF THEN-YEAR $



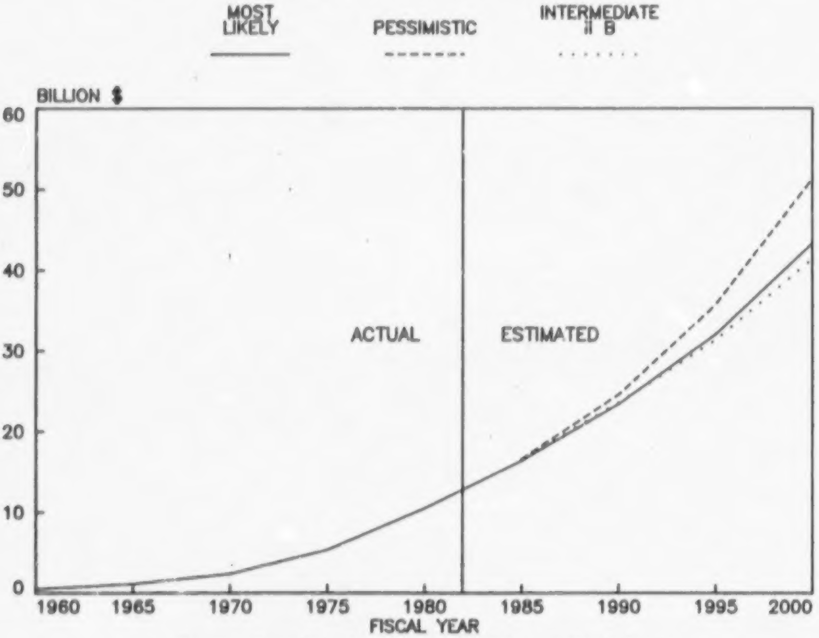
Source: Department of Defense, Office of the Actuary
*Date of projection – October 11, 1982

The Defense Department will spend about $16.4 billion—about $11,515 per beneficiary—in fiscal year 1983 for retired pay and survivor annuities. These outlays will constitute about 7.5 to 8.0 percent of estimated total DOD outlays. In comparison, total expenditures for retired pay and survivor annuities in fiscal year 1960 was $0.693 billion—$2,365 per person—and accounted for only 2 percent of DOD outlays. Indeed, from fiscal year 1960 to fiscal year 1980 the budget for the military retirement system grew faster (+1,600 percent) than the total DOD budget (+252 percent).

Outlays for the system as a share of total DOD outlays have been declining somewhat since fiscal year 1980 when they reached a peak 9-percent share. Appropriations for the military retirement system likewise have risen less than total appropriations for DOD. If the administration's long-range defense spending goals stay on track, estimated outlays for the system in fiscal year 1987—about $22 billion—will be approximately 6.1 percent of total DOD outlays. This trend, of course, should be expected as more dollars are spent on current defense needs.

Figures 3, 4, and 5 on the following pages show past and future cost trends through fiscal year 2000 for each of the major elements of the retirement system. Nondisability retired pay currently makes up 88 percent of the total cost. Disability retired pay accounts for another 8.5 percent, and survivor annuities, around 2.8 percent. The projections through fiscal year 2057 indicate that these proportions will shift slightly: outlays for nondisability retired pay will rise to about 91 to 92 percent of the system's total cost; disability retired pay will decline to about a 6-percent share; and survivor annunties will increase to about 4.5 percent of total costs and then gradually return to close to its current 2.8 percent share.

FIGURE 3.
TOTAL ANNUAL COST OF NONDISABILITY RETIRED PAY*
FY 1960 – FY 2000
IN BILLIONS OF THEN-YEAR $

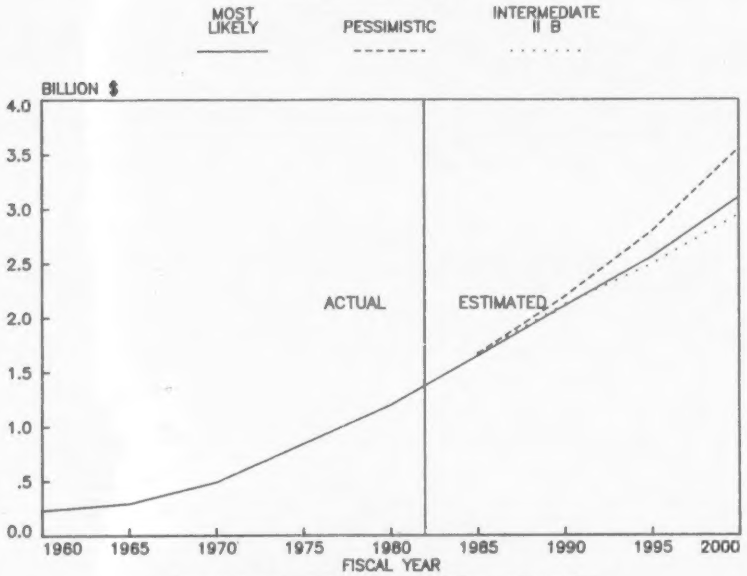


Source: Department of Defense, Office of the Actuary
*Date of projection – October 11, 1982

FIGURE 4.

TOTAL ANNUAL COST OF DISABILITY RETIRED PAY*

FY 1960 – FY 2000
IN BILLIONS OF THEN-YEAR $

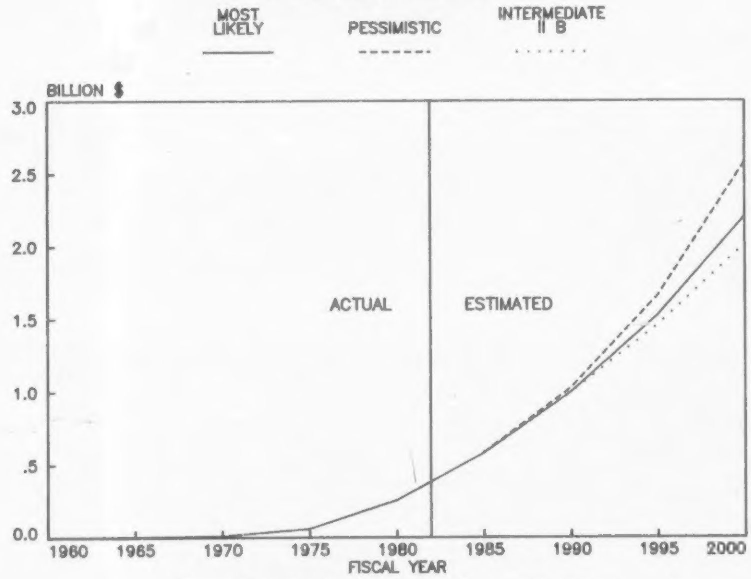


Source: Department of Defense, Office of the Actuary
*Date of projection – October 11, 1982

FIGURE 5.

TOTAL ANNUAL COST OF SURVIVOR BENEFITS*

FY 1960 – FY 2000
IN BILLIONS OF THEN-YEAR $



Source: Department of Defense, Office of the Actuary
*Date of projection – October 11, 1982

Under the current benefit structure and pay-as-you-go, noncontributory financing policy, the Federal Government's liability to pay future benefits under the three economic and mortality assumptions ranges from $552 billion to $750 billion. Under DOD's "most likely" forecast the bill is $668 billion. This liability represents DOD's estimate of the present value of future benefits for persons already in the system—current retirees, members on active duty, and drilling reservists who will become entitled to retired pay, as well as current and future survivor beneficiaries.

The Department's valuation of future benefits under the "most likely" scenario indicates that *51.1 percent of the basic pay of every member in active service would have to be set aside and accured at interest in order to pay the cost of future retirement benefits for those few who eventually retire.*

The percentage was calculated by using the entry-age-normal-cost method: that is, the annual cost of the value of future benefits for a *cohort of new entrants* into the military services expressed as a percent of basic pay. Thus, in order to pay retirement benefits to those in the cohort who eventually would qualify for retirement benefits, 51.1 percent of the basic pay of each member in the cohort would have to be set aside continuously and accured at interest for as long as the member receives basic pay. The DOD estimates that on average 12 percent of a new-entry cohort of officers and enlisted persons serves long enough to qualify for nondisability retirement benefits. The average varies widely between officers and enlisted members, however: 35 percent of new-entry officers will qualify for nondisability retired pay compared to only 12 percent of newly acquired enlisted members.

The entry age normal cost is estimated to be only 41.5 percent of basic pay under the intermediate II–B scenario and 58.3 percent for the pessimistic.

Under the "most likely" scenario, if continuous payments of 51.1 percent of basic pay were set aside for the purpose of financing retirement benefits for future service, the remaining unfunded liability—total liability less the amount set aside—would be about $539 billion. Similarly, the unfunded liability for the intermediate II–B projection would be $452 billion and for the pessimistic forecast, $601 billion.

The Defense department estimates that outlays for the military retirement system in fiscal year 1983 will be about 57 percent of outlays for basic pay. Indeed, the Department's 75-year projections indicate that retirement outlays under the current financing and benefit policies will average from 58.1 percent of basic pay costs for the intermediate II–B scenario to 68.2 percent for the pessimistic scenario. The "most likely" projection indicates that outlays will average 63.5 percent of basic pay. These ratios contrast to fiscal year 1970 when retirement costs were 22.2 percent of basic pay. It is important to note, however, that these projections assume pay will keep ahead of prices. This was not the case for much of the 1970's, when from 1971 to 1979, retired pay increased 93 percent compared to a 67-percent increase in basic pay. Should a similar situation recur, then the ratio of outlays for retirement to outlays for basic pay will be higher than those cited above.

The growth in the past and projected cost of the military retirement system can be attributed to four factors:

(1) There was over a fivefold increase in beneficiaries from fiscal year 1960 to fiscal year 1980. DOD's projections reflect continued moderate growth so that by fiscal year 2000 there will be about 2 million beneficiaries.

(2) From fiscal year 1960 to fiscal year 1983, basic pay, the base for computing retired pay, increased 389 percent or 7.5 percent annually. The projections estimate average annual increases in basic pay in the range of 5.6 percent to 6.4 percent from fiscal year 1984 through fiscal year 2000.

(3) From fiscal year 1960 through fiscal year 1982, cost-of-living increases in retired pay averaged almost 6 percent annually; the projections assume average annual raises in the range of 4.9 percent to 6.2 percent from fiscal year 1983 to fiscal year 2000.

(4) Following the trend for all Americans, retirees on average are living longer.

Clearly, then, the Federal Government has accrued a substantial financial obligation for past defense. And, if the United States continues to maintain Active and Reserve Forces at strength levels on the order of 3 million persons for current defense, a substantial part of the cost of that decision will be in retired pay and survivor annuities. The cost data also show that if economies in the cost of military retirement are considered necessary they must be obtained by cutting benefits for both future retirees and for current beneficiaries as well.

EFFORTS TO REDUCE THE COST OF THE MILITARY RETIREMENT SYSTEM

Over the past nearly 35 years, beginning with the Advisory Commission on Service Pay (Hook Commission) which issued its report in 1948, there have been numerous studies recommending changes to the military retirement system that promised reduced costs. For a variety of reasons the proposed changes did not find strong supporting constituencies either in the executive branch or in the Congress. In recent years, however, a number of specific actions have been taken to restrain the cost of military retirement as well as other Federal retirement programs. Last year, the administration offered several proposals to Congress in conjunction with the fiscal year 1983 budget that were intended to restrain growth in the cost of these programs. Congress did not adopt the proposals, but the Omnibus Budget Reconciliation Act of 1982 included other measures to reduce retirement costs. These measures with respect to military retirement are summarized below.

One of the tasks of the President's Private Sector Survey on Cost Control (PPSSCC), a task force of 150 private citizens primarily from business and industry formed by President Reagan in February 1982 to recommend ways to reduce costs in Federal programs, is to recommend cost-saving changes to the military retirement system. News accounts have reported that a PPSSCC staff report is highly critical of the current system and recommends substantial changes. The November 8, 1982, issue of the *Navy Times,* reported that the staff report complained that the military retirement system "has five times better benefits and five times higher costs than the better private plans." [1]

President Reagan has asked the Defense Department's fifth quadrennial review of military compensation (5th QRMC), which will be doing its work in 1983, to review the military retirement system and its associated benefits as well as the special incentive pay system to determine the extent to which these systems contribute to national defense. Secretary of Defense Weinberger has directed the 5th QRMC to seek advice from compensation experts outside DOD, including representatives of the PPSSCC, and to finish its work on military retirement as quickly as possible.

The first part of this section summarizes actions taken in the past few years to restrain costs as they pertain to military retirement; the second part focuses on recommendations made by past studies to change the benefit structure of the system.

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[1] Philpot, Tom. *Navy Times.* Pay Overhaul Studied by Businessman Panel. Army Times Publishing Co., vol. 23, No. 16, Nov. 8, 1982, p. 3/10.

(A) Recent Actions To Restrain Military Retirement Costs

(1) COST-OF-LIVING ADJUSTMENTS (COLA)

Since 1963, military retired pay, like pensions paid by the Civil Service Retirement System, has been indexed to increases in the Consumer Price Index (CPI). Beginning with the repeal of the so-called "1-percent kicker" in 1976, a number of legislative actions have been taken to restrain the cost of COLA's.

The kicker was added in 1969 to the former statutory formula used to determine when and by how much retired pay was increased. It added 1 percentage point to the actual percentage increase in the CPI over the base CPI set by the last COLA. The extra 1-percent was justified on the grounds that it compensated for the continued rise in inflation between the time the formula triggered a COLA and when retirees saw the increase in their retired pay. The kicker was repealed because it was adding substantial and unwarranted costs to the military retirement system by increasing retired pay above the inflation rate, as measured by the CPI.

The statutory COLA formula was revised in October 1976 to authorize COLA's on a semiannual basis in compensation for repealing the kicker. The old formula triggered a COLA each time the CPI increased 3 percent over the CPI established as the base for the last COLA. Five years later, the Omnibus Reconciliation Act of 1981 replaced semiannual COLA's with annual COLA's.

The Ominbus Reconciliation Act of 1982 places a ceiling on COLA's in fiscal years 1983, 1984, and 1985 for retirees under age 62, except for those receiving disability retired pay. The ceiling is one-half of an assumed percentage increase in the CPI, as stated in the act for each fiscal year, plus any amount by which the actual increase in the CPI might exceed the assumed increase. The assumed increases in the CPI are 6.6 percent for fiscal year 1983, 7.2 percent for fiscal year 1984, and 6.6 percent for fiscal year 1985. The act also requires that the amount of each COLA paid to a retiree working for the Federal Government be deducted from his civilian salary. This latter provision has no age restriction, but it exempts persons receiving disability retired pay or serving as Federal judges. Finally, the 1982 act spaces COLA's 13 months apart for these fiscal years.

(2) CEILING ON TOTAL INCOME FROM RETIRED PAY AND FEDERAL CIVILIAN SALARY

The Civil Service Reform Act of 1978 included provisions (5 U.S.C. 5532(c)) limiting the combined income that a military retiree working for the Federal Government may receive from his military retired pay and Government salary. The combined amount may not exceed the basic salary paid at level V of the executive schedule (currently $63,800). In general, any excess is deducted from the retiree's retired pay.

This proscription applies to a retiree who (1) *first receives retired pay after January 11, 1979, and thereafter is employed on a full-time basis with* the Federal Government and (2) who is not receiving disability retired pay.

(3) "HIGH-THREE" BASE FOR COMPUTING RETIRED PAY

The "high-three" base became law in 1980. Instead of using a member's final basic pay for computing his retired pay, the revised base uses an average of his highest 36 months of basic pay. The high-three base has the potential to yield substantial savings because it will reduce individual retired pay in the range of 10 percent. Since the new rule applies only to members who join the military services after September 7, 1980, it will not be implemented fully until after the year 2000.

The Senate Armed Services Committee originally proposed the new base and recommended that it apply to members with less than 10 years of service. The House Armed Services Committee took the position that the new procedure not apply to anyone in active service on the date it became law. The House position prevailed in the conference committee.

(4) REVISED FORMULA FOR COST-OF-LIVING ADJUSTMENTS IN ANNUITIES

The administration, in conjunction with the fiscal year 1983 budget, proposed a new formula for adjusting retirement annuities. The administration's proposal would have replaced the current formula, linking COLA's to increases in the CPI, by one that would increase annuities either by the percentage increase in the CPI or the percentage increase in basic pay, whichever was the lesser increase. Congress did not adopt the proposal, but it remains a viable option.

The administration's proposal is based on a recommendation by President Carter's Commission on Pension Policy to establish such a formula pending development of a new COLA formula by the Bureau of Labor Statistics (also recommended by the Commission). The proposed formula, of course, would yield savings in relation to the current CPI linkage in situations where the rate of increase in basic pay would be less than the increase in the CPI. Since the administration's fiscal year 1983 budget assumed military pay raises would exceed increases in the CPI for the period fiscal year 1983 to fiscal year 1987, no savings were anticipated. Nonetheless, the administration's proposal would have the long-term effect of restraining cost growth if it were adopted.

The proposed formula, moreover, would avert so-called "inversions" in retired pay in situations where retired pay increases at a faster rate than basic pay. As noted earlier, this was the case for much of the 1970's. The result is that the retired pay of a member who retired before another member and had his initial retired pay computed from an earlier pay scale will be more then the second member's, even though they both retired with the same grade and years of service. The difference is due to the effect of an inflation-indexed method for increasing retired pay. To illustrate the point: the monthly retired pay of an E-7 (master sergeant or equivalent) who retired with 20 years of service and whose initial retired pay was computed on the October 1, 1974, basic pay scale is currently about $166 more than that of a retiree with the same service and grade but whose initial retired pay was based on the October 1, 1981, basic pay scale.

It was feared that "inversions" would cause the early loss of retirement-eligible members. This concern led to enactment of so-called "multiyear look-back" procedures that allows a member to have his initial retired pay computed on an earlier pay scale and then adjusted by subsequent COLA's in retired pay.

(5) REVERSE RECOMPUTATION

The administration also coupled a so-called "reverse recomputation" proposal with its proposed new formula for COLA's. (Before 1958, with certain exceptions, each time active duty pay was increased, retired pay was *recomputed* on the basis of the new pay scale.) This proposal would have denied a COLA to any retiree whose retired pay is 120 percent or more above the amount that he would be paid if his retired pay were *recomputed* on the current rate of basic pay in effect for his grade and years of active service. A retiree whose retired pay is more than 100 percent but less than 120 percent above the *recomputed* rate would receive 75 percent of the full COLA permitted by the new formula. All others would receive the full COLA.

The long-term effect of this proposal would be to depress COLA's for a retiree whose retired pay is more than what it would be if it were based on the most recent basic pay scale. His retired pay would continue to be depressed until it equaled the amount that it would be if it were based on the most recent basic pay scale; thereafter, he would be entitled to the full COLA as determined by the proposed new formula. The administration estimated that this recommendation would have saved about $1.1 billion for the 5-year period fiscal year 1983 to fiscal year 1987 had it been enacted.

This proposal, coupled with the proposed new formula for COLA's, would maintain retired pay at rates equal to or less than the rates permitted by the most recent rates of basic pay. Besides their potential for long-term cost savings, proponents can argue that the administration's proposals would place retired pay in proper balance with basic pay. The chief argument against the administration's proposals is that they violate the longstanding principle of protecting retired pay and survivor annuities from inflation.

(6) ELIMINATING "LOOK-BACK" PROVISIONS

Current law provides that when a member retires, he may elect to have his initial retired pay computed on an earlier basic pay scale than the scale in effect on the date he retires. The determined amount is then adjusted by all cost-of-living increases in retired pay that occurred between the effective date of the pay scale used to compute his initial retired pay and the date he actually retires. There are two such provisions, which have been dubbed "look-back" provisions. One provision, enacted in 1967 as a temporary technical amendment to a law revising the procedure for COLA's in retired pay, allows a member to "look-back" one previous pay scale. A second provision allows a member to "look-back" to any basic pay scale in effect on or after January 1, 1971, provided the member was eligible to retire when the pay scale chosen was in effect.

At the time the "multiyear look-back" provision was enacted, retired pay was increasing faster than basic pay because of the effects of inflation on the former and pay caps on the latter. This situation was creating the "inversion" problem explained above. The purpose of the 1975 "look-back" provision is to encourage a retirement-eligible member to remain in active service by insuring that he would not receive less retired pay when he retires than he would be receiving if he had retired earlier.

Last year, 1982, the administration recommended repeal of the "1-year look-back" provision. It did not expect any savings from this action because it was assumed that future increases in basic pay would exceed retired pay increases. If this situation is reversed, some savings would accrue.

In August 1982, the GAO reported on the "look-back" provisions and recommended that "1-year look-back" be repealed because it was no longer justified ("Military's 1-Year 'Look-Back' Retirement Provision Should be Revoked: Multiyear Provision Should be Reviewed," FPCD-82-38). It also recommended with respect to "multiyear look-back," that DOD show that retaining senior personnel is a problem and that this provision is a cost-effective solution. In making the latter recommendation, GAO had noted that Defense officials feared a "mass exodus of senior personnel" if "multiyear look-back" was repealed.

GAO's report also noted that if the administration's proposed formula for determining COLA's was enacted along with "reverse recomputation," the "1-year look-back" provision would be superseded and the utility of the "multiyear look-back" provision would gradually phase out.

(B) Proposals To Revise Nondisability Retirement

This part focuses on nondisability retirement of active duty members. This aspect of the system accounts for nearly 90 percent of its cost and therefore offers the largest potential for savings through changes in the benefit structure. It is also this aspect of the military retirement system that draws the most criticism.

Changes to the nondisability retirement structure for active duty members, however, can have implications for members of the Reserve components and other elements of the system as well. Such changes, moreover, will effect members of the Coast Guard, and the commissioned officers of the Public Health Service and the National Oceanic and Atmospheric Administration whose retirement benefits are regulated by similar laws.

As noted earlier, the first major study of the military retirement system was that of the Advisory Commission on Service Pay, or the Hook Commission. The commission, named for its chairman, Charles R. Hook, then head of American Rolling Mills Co., proposed sweeping revisions to existing disability and nondisability retirement laws. Congress adopted the commission's suggested changes for disability retirement procedures. These remain the basis for the laws governing disability retirement today. But, the commission's recommended changes for nondisability retirement were deferred on grounds that they radically departed from existing procedures and therefore needed further study.

Seven major studies have followed the Hook Commission:

—*The First Quadrennial Review of Military Compensation (1st QRMC),* a DOD study group that issued its report in 1969. (Section 1008(b) of title 37, United States Code requires these reviews at least every 4 years.) No legislation resulted from this study, but its recommendations formed a foundation for changes proposed by subsequent studies.

—*The Interagency Committee (IAC),* made up of representatives of the Defense Department, Veterans Administration, U.S. Civil Service Commission, and the Office of Management and Budget. Its report was prepared in 1971.

—*The Department of Defense Study Group in 1972,* which was a follow-on to the IAC study. Legislation resulting from this study—the Retirement Modernization Act (RMA)—was introduced in Congress in 1974, but following an initial hearing by the House Armed Services Subcommittee on Military Compensation the proposal died.

—*The Third Quadrennial Review of Military Compensation (3d QRMC),* which issued its report in 1976 reaffirming the proposed RMA.

—*The Defense Manpower Commission (DMC),* established by Congress to study a broad range of defense manpower issues, including retirement. The commission's report was issued in 1976. Its recommendations regarding military retirement were never translated into legislation.

—A study and an associated legislative proposal introduced by Representative Les Aspin in 1976.

—*The President's Commission on Military Compensation (PCMC)* established by President Carter. Its report was submitted in 1978.

—A follow-on DOD study of the PCMC report resulting in the proposed "Uniform Services Retirement Benefit Act (USRBA)." DOD sent this controversial proposal, which did not have the support of the military services, to Congress in 1979, but is was not introduced.

The major recommendations of these studies are summarized in the appendix to this chapter. In addition to these studies, the Congressional Budget Office (CBO) and General Accounting Office (GAO) have periodically suggested revisions to the system's benefit structure.

The crux of the cost issue is service "up-or-out" policies coupled with the 20-year retirement entitlement. Critics contend that this combination causes the services to lose highly qualified members at the peak of their capabilities. In turn, the military services must recruit and train new and inexperienced personnel. Critics argue that this cycle waste valuable manpower resources and adds unnecessary costs to the defense budget for recruiting, training, and retention incentives, not to mention the cost of retired pay and other benefits for military retirees. Admiral Hyman Rickover adds another dimension to the criticism: he contends that the present system encourages mediocre people to remain in service while the best people—those who can command more lucrative incomes in civilian pursuits—leave as soon as they can after completing 20 years.[2]

Critics also point out that military retirees receive full, inflation-protected retired pay as well as other benefits—medical care, commissary privileges, etc.—for the rest of their lives although most retirees are employed for many years after retirement. (Refer to table 3, on page 342, for illustration of lifetime values of military retired pay.)

The Defense Manpower Commission concluded in its report that "[T]here are few benefits provided by civilian plans which approach the magnitude of the total benefits available to a military member who retires honorably from military service." [3] The PCMC reached similar conclusions. Comparing the military retirement system to other retirement programs, the PCMC reported that:

> The current system provides generous lifetime benefits. For 20-year retirees in particular, these benefits exceed what most other employers provide.
>
> In old-age the combination of military retired pay and social security benefits yield annual retirement benefits that are more generous than those provided by most public and private sector plans.[4]

(1) THE KEY ISSUES

Arguments for and against changing the military retirement system revolve around two intertwined issues: the requirement for youth and vigor and the special demands of service life—the so-called "X factor." The following paragraphs summarize these issues.

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[2] U.S. Congress. House. Committee on Post Office and Civil Service, Subcommittee on Investigations. Dual Compensation Hearings. 95th Cong., 1st sess., July 26, 28, Sept. 21, 1977, pp. 6 and 7.

[3] Defense Manpower Commission. Defense Manpower: The Keystone of National Security. Report to the President and the Congress, April 1976. U.S. Government Printing Office, Washington, D.C., p. 372. [Hereinafter referred to as DMC.]

[4] President's Commission on Military Compensation. Report of President's Commission on Military Compensation, April 1978. U.S. Government Printing Office, Washington, D.C., p. 28. [Hereinafter referred to as PCMC.]

THE YOUTH-AND-VIGOR ISSUE

Statistical data compiled by the Defense Department's Office of the Actuary confirm the fact that military personnel on average retire from active duty at relatively young ages and very soon after they have accrued 20 years of service. Figures 6 and 7 on the following pages show the age and years-of-service distribution of officers (7,468) and enlisted (24,531) nondisability retirees in fiscal year 1981. The data show that 57 percent of the officer retirees were under age 46 and 61 percent had from 20 to 24 years of service. Similarly, 50 percent of the enlisted retirees were 36 to 40 years old and 68 percent had from 20 to 22 years of service. Overall, 79 percent of the retirees were under age 46 and 38 percent (26 percent of the officers and 41 percent of the enlisted personnel) had the minimum 20 years of service for retirement eligibility.[5]

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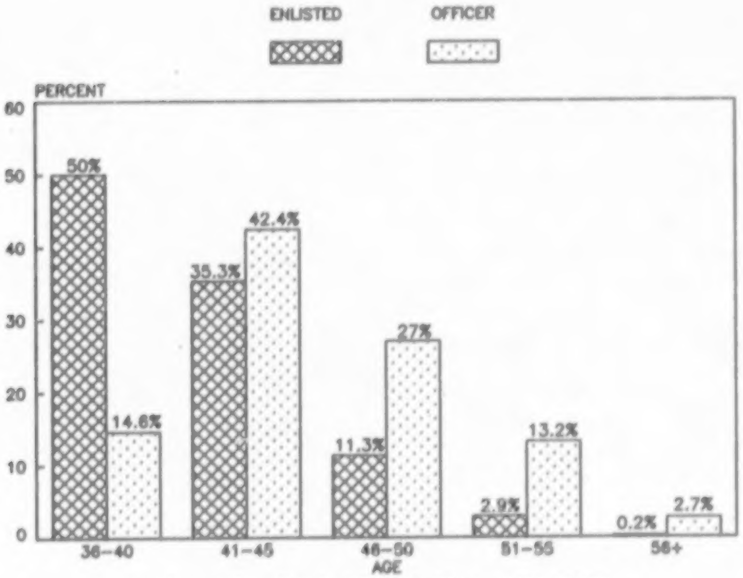
[5] U.S. Department of Defense. Office of the Actuary, Defense Manpower Data Center. Fiscal Year 1981 DOD Statistical Report on the Military Retirement System, pp. 126 and 141.

FIGURE 6.

AGE DISTRIBUTION OF FY 1981 NONDISABILITY RETIREES

(PERCENT)

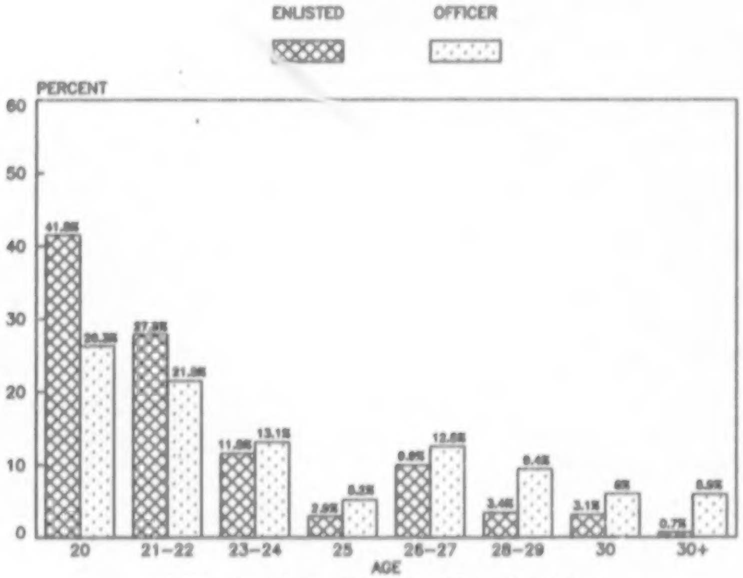


Source: Department of Defense, Office of the Actuary

FIGURE 7.

YEARS-OF-SERVICE DISTRIBUTION OF FY 1981 NONDISABILITY RETIREES

(PERCENT)



Source: Department of Defense, Office of the Actuary

Early retirement also is the norm for the service's senior military leadership. The average age of general and flag officers who retired in fiscal year 1981 was 55; the youngest was 45 and the oldest, 62. The average years of service for these officers was a little over 31. The largest number—43 out of a total 148—retired with 30 years of service as the result of the up-or-out promotion[6] systems used by the military services.[6]

Defense spokesmen have defended the necessity for early retirement on grounds that military service requires young and vigorous people. The Department's position is summed up in the words of a staff paper prepared for the 1st QRMC:

> For the vast majority of its "employees" the military organization requires retirement at a relatively young age. The basis for this requirement is an emphasis on the maintenance of a young and vigorous military force capable of performing vital defense and combat missions. As a result of prior experience wherein promotion stagnation and superannuation of personnel led to military forces with less than the desired efficiency and capability, the need for such an emphasis is well established and generally recognized.[7]

The youth-and-vigor argument is particularly relevant to the officer corps. Defense officials assert that successful leadership requires high standards of mental and physical ability, enthusiasm, and adaptability. The pre-World War II experience of the Army illustrates their point.

For decades prior to World War II, the Army had promoted its officers through colonel by strict senority as vacancies occurred. Promotions were slow because vacancies were scarce. Normally, Army officers could only be retired without their consent when they reached age 64. In contrast, the Navy had adopted a competitive, up-or-out officer promotion system as early as 1916.

As the conflicts in Europe and Asia nudged the United States toward strengthening the military services, the Army found itself with many senior officers "unable to stand up under the strain to which they are being subjected in the building up of our Army to meet the demands of modern combat." [8] At the urging of the Secretary of War, Congress passed emergency legislation—The Army Vitalization Act of 1941—to enable the Army to expeditiously eliminate incapable officers.

The PCMC noted in its April 1978 report that the arguments for youth and vigor "abound" in defense of 20-year retirement. The report went on to assert:

> . . . but this vague concept has never been defined. Certainly the fighting forces of our Nation must be able to

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[6] Ibid., pp. 126 and 141.

[7] U.S. Department of Defense. Modernizing Military Pay. Report of the First Quadrennial Review of Military Compensation. Volume V, The Military Estate Program (Appendices). Jan. 15, 1969, p. III-4/5.

[8] U.S. Congress. Senate. S. Rept. 541 to accompany S.J. Res. 88, p. 1.

> perform at high levels of mental agility and physical stamina. They must be able to undertake arduous and stressful tasks and operate in unusual environments with no decline in performance. Nevertheless, the need for these skills and abilities is not uniformly distributed throughout the force. Many jobs in the military require a different set of abilities and place little or no premium on youth and vigor.[9]

The Commission studied the occupational distribution of enlisted personnel and concluded that "the percentage of enlisted personnel in ground combat skills has fallen from 30 percent in World War II to less than 15 percent today." [10]

For a 1978 report recommending that military personnel serve longer careers, the GAO sampled the service careers of officers and enlisted personnel who had retired in fiscal year 1975. The sample showed that 92 percent of the service careers of the enlisted retirees and 66 percent of the service careers of the officer retirees had been spent in noncombatant duties (as defined by GAO). The GAO study also found that 81 percent of the enlisted personnel and 30 percent of the officers had never been assigned combat-related duties throughout their careers.[11]

DOD disputed the GAO findings, arguing that: (1) the sample size appeared too small; (2) there was no evidence that a sample of 1975 retirees was indicative of the careers of all military personnel; and, (3) under GAO's definition of combat and noncombat assignments, 87 percent of all Navy enlisted casualties from hostilities in Vietnam were noncombatants. With respect to DOD's last argument, the GAO report said that DOD officials were unable to tell which of the casualties were careerist, nor could they tell what percent of the members were performing duties requiring youth and vigor.[12]

Critics of the Defense Department's youth-and-vigor defense may have found some support from the country's highest military leader. According to a November 29, 1982 article in the Air Force Times, Gen. John W. Vessey, Jr., Chairman of the Joint Chiefs of Staff, is quoted as saying in a recent interview that the "changing nature of warfare may justify changes in military retirement." [13] The article said that General Vessey "suggested" that the age requirements for the military are changing so that youth and vigor may be growing less important. The general indicated that "[r]ight now I guess that the problem is not so much forcing people out at 20 as it is finding a way to keep those people who should stay in beyond 20 years." The general said, however, that the present structure should continue to apply to those already serving.

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[9] PCMC, p. 53.

[10] Ibid.

[11] U.S. Congress. Office of the Comptroller General. Report to the Congress of the United States. The 20-Year Retirement System Needs Reform. U.S. General Accounting Office, Washington, Mar. 13, 1978, pp. 8-12. [Hereinafter referred to as GAO The 20-Year Retirement System Needs Reform.]

[12] Ibid, p. 37.

[13] Philpot, Tom. Vessey: Changes May Be Due in Retirement. Air Force Times. Nov. 19, 1982, p. 16.

THE X FACTOR ISSUE. Defense officials argue that the unique demands of military service require that the Nation provide military personnel institutional security beyond that of other sectors. They cite numerous reasons to support their contention:

—Military personnel are required to serve anywhere, at anytime, often under adverse and inhospitable conditions.

—They are exposed to dangers and risks not ordinarily experienced in most other occupations.

—Service personnel are required to make periodic relocations and they suffer frequent family separations. These experiences can often be disruptive and traumatic to the family structure.

—Service personnel often work long hours for which they do not receive compensation.

—The serviceman must give up a measure of individual freedom to protect a society that places a premium on individual freedom.

—Because the need for young and vigorous people is especially important to the military organizations, unlike civilian institutions, a military career must be foreshortened at a time for most members when their family expenses are peaking. Retired pay is insufficient to their economic needs and they must work.

Proponents of the current benefit structure assert that retirement benefits are an integral part of a total compensation package that has given the military services the quality of personnel and leadership necessary to maintain combat ready forces. They argue that the present structure of the military retirement system combined with other compensation incentives may be the most cost-effective way to retain quality career members. Measures to save retirement costs, they caution, will require other costly incentives to retain personnel.

In considering the question of whether or not the "X factor" should be considered in establishing the level of retired pay, the 1st QRMC concluded that it should not, for three reasons:

(1) It would be inequitable because it would evenly distribute a reward for unusual service that is not evenly shared among members of the military services.

(2) It would be an inefficient way to reward unusual service because it would provide the same reward to all retirees regardless of their actual service experiences and because members typically undervalue the retirement annuity.

(3) It would delay payment for unusual conditions of service until after the service is completed.[14]

Representative Les Aspin, in his report, "Guns or Pensions: A Study of the Military Retired Pay System," argued that on average military life is not sufficiently different from other occupational endeavors to justify current retirement benefits for military personnel. He observed that:

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[14] U.S. Department of Defense. Report of the First Quadrennial Review of Military Compensation. Modernizing Military Pay. Vol. IV, The Military Estate Program, Jan. 15, 1969, pp. 3-5. (Hereinafter referred to as 1st QRMC Vol. IV The Military Estate Program.)

> The military is a community of more than 2 million persons and as such is larger than 40 of the 150 countries in the world. As in any society there are more onerous and less onerous jobs, more desirable and less desirable assignments. To consider that there is some specific X factor is to lump military lawyers in with a ship's boilerroom men. We can no more stereotype the military than we can the population of Oregon, which is virtually the same size as our military population.[15]

(2) Proposals for Change

20-YEAR RETIREMENT

None of the studies cited in this report proposed that 20-year retirement be abolished; most recommended that members earn entitlement to some retirement benefits before they complete 20 years of service. Each study, nonetheless, recommended alternative benefit structures that would make 20-year retirement less liberal and less costly.

Two studies (Hook and DMC) would have established a 30-year career as the norm for earning retirement benefits. Under the Hook proposals only officers who were age 60 or older could apply for voluntary retirement with a minimum of 20 years of service; for enlisted personnel, the age criterion was 50.

The DMC, whose recommendations on retirement were more in the nature of concepts than fully developed procedures, proposed that only persons "serving in combat jobs or jobs demanding extraordinary physical exertion or indefinite unaccompanied duty should be allowed to retire at less than 30 years."[16] The Commission suggested that each job be given a point value. Combat-related jobs would be given a value of 1.5 points. Noncombat-related jobs would have a value of 1 point. Intermediate values would be awarded to other jobs depending on their "combat orientation." Points would be accrued at the rate of $1/365$th of the point value of a job per day in that job. Thus, only those members who spent all their service in combat oriented assignments would be entitled to retire with 20 years of service.[17]

Other studies proposed benefit structures that were intended to encourage longer service. These proposals took the following forms:

—*Two-tier annuity structure.* Four of the studies (1st QRMC, IAC, RMA, and USRBA) proposed variations of a two-tier annuity schedule. Under this concept a retiree would be paid an immediate reduced annuity at retirement. A full annuity would be paid at some fixed date in the future. For example, the 1st QRMC proposal reduces the immediate annuity 9 percentage points from the full rate. The full rate would begin in accordance with a schedule connecting a member's years of service at the time he retires to a predetermined future age for paying the full rate. Thus, a member who retires with 20 years of service would receive a full annuity beginning at age 60; a member who retires with 30 years of service would receive a full annuity at age 55.

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[15] Les Aspin (U.S. Representative from Wisconsin). Guns or Pensions: A Study of the Military Retired Pay System. Washington, November 1976, p. 13.

[16] DMC, p. 259.

[17] It is important to note that the DMC also proposed to restrict the size of career force to bona fide job requirements. The career force would consist of members with 11 to 30 or more years of service. In concept, the DMC recommended the career force be so constructed so as to reduce the "... flow of personnel onto the retirement rolls ..." DMC, p. 260.

The IAC and USRBA made somewhat similar proposals. The IAC plan would pay the full annuity at age 60 to members retiring with less than 25 years and at age 55 to those retiring with 25 or more years. The USBRA would begin paying a full annuity at age 60 regardless of a member's total service. The RMA plan has a different twist: the full annuity for a member who retires with less than 30 years of service would begin on the date he would have completed 30 years of service had he remained in active service.

Essentially, the two-tier annuity is a "carrot and stick" incentive. It imposes an economic penalty for retiring shortly after 20 years while gradually increasing the value of the annuity for longer service.

The 1st QRMC noted that there are many reasons for members retiring, but "family obligations make economic decisions important, if not paramount. The opportunity to increase one's income by early retirement [referring to the present system] offers a powerful and hard to resist incentive to retire."[18]

In recommending a two-tier annuity schedule the 1st QRMC concluded:

> A two-step annuity is the best method for the military organization to motivate continued service, but at the same time adequately compensate for second career income loss and provide an adequate old-age annuity.[19]

Research by the 1st QRMC and the PCMC indicate that the vast majority of retirees work after retirement and stay in the civilian labor force until they reach the age at which civilians retire. Based on a Rand Corp. analysis of a 1977 DOD survey, the PCMC reported that 94 percent of the officers and enlisted members who retired with 20 to 24 years of service were either working, looking for work, or going to school full time.[20]

Using a survey of several thousand retirees, the 1st QRMC found that retirees in general earn less in their civilian occupations than do civilians of comparable age and education. The 1st QRMC concluded that retired pay functioned as an income supplement by offsetting the loss of income in the retiree's second career. On the strength of its findings, the 1st QRMC recommended that the standard for setting the first-tier annuity should be to compensate a retiree's loss of earnings in his second career.

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[18] 1st QRMC Vol. IV. The Military Estate Program, p. S-19.
[19] Ibid, p. S-4.
[20] PCMC, p. 36.

The PCMC concluded that "the combined civilian incomes and military retired pay generally exceed the incomes of comparably aged and educated civilians." Acknowledging that research had not explained all the reasons why retirees experience a loss of earnings, PCMC cited two principal factors causing the earnings differential. First, labor market factors "effectively depress retirees" civilian incomes in comparison to civilians of comparable ages and education. Second, retirees choose to "retire in certain areas, seek kinds of jobs, or accept lower paying jobs that provide more leisure or intrinsic satisfaction." [21] Regarding the latter factor, a PCMC research paper tentatively concluded:

> Approximately 60 percent of the average differential experienced by both enlisted men and officers can be explained by choices made by the retirees, particularly their rate of labor force involvement.[22]

One can surmise that the PCMC's findings significantly influenced its recommendation to defer retired pay until old age. The PCMC proposal is discussed in the next subsection.

—*Deferred annuity.* Two studies (Aspin and PCMC) proposed that the initial payment of an annuity be based on a combination of age and years of service at retirement: an annuity would begin at age 55 for a member retiring with 30 or more years of service, or at age 60 if he had at least 20 but less than 30 years of service. Under these proposals, barring major changes to current force management policies, the vast majority of military personnel who retire would not receive an immediate annuity.

The approaches taken by Aspin and PCMC would place retired pay in the category of an old-age annuity. In a departure from past conceptions of the function of military retirement, the PCMC report stated that the primary purpose of military retirement "should be to provide adequate benefits in old age." [23] It was PCMC's position that members who retire after a full career (not defined, but persumably referring to a member retiring at age 55 with 30 or more years of service) should be "rewarded with benefits that, when combined with social security, insure a standard of living generally comparable with that enjoyed on active duty." [24] The PCMC report further asserted that others who did not serve full careers but did have "many years of service" should "receive old-age benefits" proportionate to their military service.[25]

In a novel recommendation, the PCMC proposed establishing a "deferred compensation trust fund" for each member completing 5 years of service. The fund was to function both as a retention incentive and as a buffer for the transition to civilian life.

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[21] PCMC, p. 37.

[22] Post-Retirement Incomes and Earnings of Military Personnel Who Retired From 1970 to 1974. Report prepared by the Program Analysis Division, Institute for Defense Analysis, for the PCMC. March 1978, p. vii.

[23] PCMC, p. 61.

[24] Ibid, p. 61.

[25] Ibid, p. 61.

Each member's account would be funded entirely by the Government, based on a percentage of the individual's basic pay, and accured at interest. The percentage factor would be highest (25 percent) during the 11th through 20th years of service. A member would become entitled to all moneys after completing 10 years of service.

According to figures constructed by the PCMC, the funds accumulated in these individual acounts would be substantial. For example, assuming no prior cash withdrawals, a hypothetcial officer who entered the service in 1978 would have accrued $48,550 (in 1978 dollars and under PCMC economic assumptions) at the end of 15 years of service. Similarly, an enlisted member with the same years of service and entry date would have accrued a total of $23,230 in his account.

The Aspin plan would pay an immediate annuity to each member separated from active service involuntarily, but the amount of the annuity would be reduced by $1 for each $2 of post-retirement earned income.

—*Giving greater credit for longer service in computing retired pay.* The current method of computing retired pay uses a flat rate of 2.5 percent of basic pay for each year of service up to a maximum of 30 years of service—i.e., 75 percent of basic pay. This procedure is criticized for not differentiating for length of service; in particular, it is an inadequate incentive to retirement-eligible members to serve longer. With the exception of Hook and DMC, the studies recommended weighted multipliers in one variation or another with some recommending credit for service beyond 30 years.

EARLIER VESTING

Military personnel must serve 20 years to be entitled to nondisability retired pay. Members leaving before 20 years—as nearly 65 percent of the officers and 89 percent of enlisted members who enter military service do—receive no retirement benefits. (There are some compensations, however: persons who serve honorably are entitled to certain benefits from the Veterans Administration; Regular and Reserve officers and Reserve enlisted personnel (but not Regular enlisted members) with over 5 years of service who are involuntarily released or discharged from active duty are paid separation pay; and, military service can be used to qualify for State and Federal retirement benefits.)

All but two of the studies recommended earlier entitlement to military retired pay: Aspin and RMA recommended that members completing 5 years of service become entitled to a deferred annuity; four studies (IAC, DMC, PCMC, USRBA) recommended that entitlement to a deferred annuity accrue after 10 years of service. The recommended starting age for a deferred annuity would be age 60 or 62.

The lack of earlier vesting has been criticized for making entitlement to retired pay an all-or-nothing proposition. This is considered by many analysts as being especially unfair to persons leaving active service after having served several years. Lack of earlier vesting also is criticized for not providing military personnel a retirement benefit comparable to that afforded most public sector and private sector employees. (Early vesting is mandated by the Employee Retirement Income Security Act of 1974 for private sector employees.) In fact, a 1980 survey of 250 conventional retirement plans (plans not negotiated through employer/employee contracts), the Bankers Trust Co. reported that 90 percent of the plans provided full retirement benefits to employees completing 10 years of service.[26]

Proponents of earlier vesting believe it would help motivate members in needed skills to remain in active service through the critical 8- to 12-year service points. They also assert that it would make the services more willing to separate members whose skills and experience are surplus to the needs of the service. This argument more or less implies that surplus members with 12 to 17 years of service would be released.

The GAO's 1978 report, "The 20-Year Military Retirement System Needs Reform," also recommended that military personnel accrue entitlement to a deferred annuity beginning at age 62 after 5 years of service. This change would give military personnel the same entitlement afforded civil service workers by the civil service retirement system. GAO stated that "[i]n our opinion, resolution of the vesting issue is a critical step in successfully changing the career patterns of military members."[27]

The principal argument against earlier vesting is that it could act as an incentive for those members with marketable civilian skills to leave active service earlier than they would if they could not qualify for retirement benefits before serving 20 years. There is also a large question about the extent to which early vesting would affect career patterns either through voluntary actions taken by individuals, or through separation actions initiated by the services.

Whether or not earlier vesting would add to retirement costs or produce savings depends on answers to questions like the following: How much service should be required for entitlement? What other changes, if any, should be made to other retirement benefits, including ancillary benefits such as medical care? What effect would these changes have on career patterns? Would early vesting be a negative or positive retention incentive?

MEMBER CONTRIBUTIONS

As noted earlier, military personnel do not contribute toward their retirement. (They do, however, pay social security taxes and contribute toward survivor benefit coverage via reductions in their retired pay.) In contrast, Federal retirement plans for civilian employees and almost all State and local government retirement plans require employee contributions.

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[26] Bankers Trust Co. Corporate Pension Plan Study: A Guide for the 1980's, p. 7. (Hereinafter referred to as Bankers Trust Co.)

[27] GAO, The 20-Yeer Retirement System Needs Reform, pp. 23-24.

The situation is reversed with respect to private sector plans. The 1980 survey of private sector plans by the Bankers Trust Co. showed that 81 percent of the 250 conventional plans included in the survey did not require employee contributions compared to 67 percent in 1967. The survey also found, as it did in 1975, that none of the employee/employer-negotiated plans required member contributions.[28]

Only two of the studies cited in this report (1st QRMC and Aspin) recommended that military personnel contribute part of their pay toward their retirement.

The prime argument for requiring military personnel to contribute toward their retirement, of course, is to reduce the cost of the military retirement system to the Federal Government. Besides cost considerations, there are other general arguments favoring contributory systems. For example, a 1976 GAO report "A Contributory Retirement System for Military Personnel", noted that the basic philosophy of contributory retirement systems is that cost-sharing promotes mutally advantageous benefits to both employer and employee. GAO also noted that by contributing to their pension plan employees have leverage to enforce their rights to benefits and to require employers to make adequate contributions. In view of the trend toward noncontributory plans in the private sector, however, these two arguments would appear to lack much force.

If military personnel were required to contribute 7 percent of their basic pay toward retirement beginning in fiscal year 1983, the Federal Government would save roughly $40 billion or about 8 percent of the cost of disability and nondisability retired pay through fiscal year 2000. This estimate is based on the following factors:

- It uses the estimated outlays for basic pay provided in the DOD projections of the cost of the military retirement system for determining revenue generated by a 7-percent payroll deduction.
- It assumes 33 percent of the total amount contributed by members over the 18-year period will be refunded as a matter of equity, without interest, to individual members leaving military service before retirement. The 33-percent factor is extrapolated from data developed by GAO in its 1976 report (refer to the table on page 39 of the GAO report) for a similar cost/savings estimates covering the period fiscal year 1975 through fiscal year 2000.
- It assumes that no other changes are made in retirement benefits.
- It assumes a 7-percent contribution rate because Federal civilian employees under the civil service retirement system make the same percentage contribution.

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[28] Bankers Trust Co., p. 7.

- It *does not* assume any grandfathering.

- It *does not* assume payments into a retirement fund for the purpose of amortizing the current unfunded liability.

- It assumes that military pay currently is not depressed for an imputed contribution toward retirement benefits.

The last assumption is mentioned because it has been suggested in the past that military pay is depressed by an imputed contribution toward retirement. The reasoning goes that if actual deductions from military paychecks were required, military pay would have to be increased to preclude double payments from members.

The House Armed Services Committee (HASC) and the Defense Department took the position in the past that there was an imputed retirement contribution. For example, a 1971 HASC report (Report No. 92-82, Mar. 25, 1971) stated that ". . . military compensation is depressed by 7 percent to reflect an imputed contribution toward the member's retirement." The Senate Armed Services Committee did not agree with the HASC and DOD.

A DOD staff study prepared for the 3d QRMC (1976) found no evidence to support contentions that military pay is depressed for an imputed retirement contribution. It concluded that ". . . neither the proposition that [military compensation] is depressed by 7 percent or any other exact percentage nor the premise that this percentage reduction is an imputed retirement contribution is demonstrable." [29] Although the DOD study appears to have settled the matter, the issue could be raised again if Congress actively considers requiring military personnel to contribute toward their retirement.

The 1976 GAO study cited above demonstrated that if basic pay were raised 7.5 percent to offset a 7-percent (refundable) deduction for a retirement contribution ($100-7=93$; $100\times1.075\approx100$), it would increase the total cost of basic pay and retired pay compared to the present noncontributory policy. Again extrapolating from GAO's methodology, the estimated $40 billion in savings for the fiscal year 1983 to fiscal year 2000 gained through member contributions would turn into an estimated $20 billion in costs if basic pay were increased 7.5 percent.

Requiring members to contribute part of their basic pay toward retirement without a compensating increase in pay would probably be perceived as an erosion of benefits. Indeed, a 7-percent contribution would have a substantial economic effect on military personnel. For example, the basic pay of an E-5 (staff sergeant or equivalent) with 8 years of service would be cut $70 a month; similarly, the basic pay of an O-3 (captain/lieutenant) with 8 years of service would be cut about $146 a month.

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[29] U.S. Department of Defense. Third Quadrennial Review of Military Compensation. Office of the Secretary of Defense. Military Compensation Background Papers: Compensation Elements and Related Manpower Cost Items, Their Purpose and Legislative Background. Washington, U.S. Government Printing Office, August 1976, p. 54.

Various surveys conducted by the military services have shown that retirement benefits have little or no effect on the proclivities of young people to join the military or to remain in active service. Thus, opponents can argue that a retirement contribution without a compensating increase in pay will be detrimental to recruiting and retention. Moreover, if member contributions are refundable, the accumulated funds may serve as an inducement for members to leave active service. To combat this problem, opponents can argue, could entail increased expenditures for recruiting and retention inducements, thereby offsetting to some extent savings obtained in retirement costs.

Another factor to be considered in requiring retirement contributions is that military personnel pay social security taxes. In calendar 1983 the withholding rate will be 6.70 percent. A second deduction for retirement—especially one that in the aggregate would yield appreciable savings in the cost of retired pay—would probably be found inappropriate because the combined deduction would result in an unacceptable reduction in net pay. On the other hand, removing nearly 3 million covered wage earners (about 2 million members on active duty and 1 million paid reservists) from a financially troubled social security system would not appear prudent. If a retirement contribution is considered appropriate, the most feasible solution would appear to be a single contribution derived from an integration of military retirement benefits and social security benefits.

SOCIAL SECURITY INTEGRATION

Before 1957, persons were given gratuitous social security wage credits for active duty military service performed from September 16, 1940 to December 31, 1956. The purpose of gratuitous credits, which was first authorized by a 1946 act, was to preclude interruption in earning social security credits for persons having to perform military service. The Servicemen's and Veteran's Survivor Benefit Act of 1956 extended social security coverage to military personnel beginning January 1, 1957. Military personnel and the DOD have been paying social security taxes ever since.

Social security benefits are paid to military retirees in addition to their retired pay. Most of the studies cited in this report recommended that a member's military retired pay be reduced when he begins receiving social security benefits. The studies offered various methods for reducing retired pay. The 1st QRMC recommended that retired pay be offset by the full amount of the social security benefit attributable to a member's military service. The IAC and RMA, rationalizing that the Government and the member make equal contributions to social security, proposed that the offset be 50 percent of the annuity attributable to military service.

The DMC, on the other hand, recommended against an offset because ". . . the structure of the social security benefit system does not permit an unambiguous attribution of benefits to any one employer when the individual has had covered employment with two or more employers."[30] Instead of an offset, the DMC recommended that military retired pay should be set at levels that take cognizance of social security benefits.

The PCMC, and the follow-on USRBA, proposed an offset formula that, according to the PCMC report, recognizes the attribution problem exposed by the DMC. The PCMC proposed that retired pay be reduced by 1.25 percent of the initial social security primary benefit for each year of military service. The maximum offset, applicable only to a member with 40 years of service, is limited to 50 percent of a member's retired pay. The PCMC also reported that the proposed formula recognizes that members pay half of the social security tax.

The obvious advantage of integrating military retired pay and social security old-age annuities is the substantial savings it offers in Federal expenditures. Proponents also can argue that:

- Combining the two benefit structures responds to one of the major criticisms of the military retirement system: that the combined income from military retired pay and social security benefits provides a more generous old-age benefit than do most public and private sector plans. In this regard, the PCMC concluded that "[f]or retirees with long service, the combination [of military retired pay and social security benefits] produces a total retirement after-tax income that generally exceeds 90 percent of the active-duty after-tax income of the retiree."[31]

- Integrating benefits would bring the military retirement system in line with the practice of 86 percent of conventional private sector pension plans.[32]

- Integrating benefits eliminates an unwarranted entitlement to two Federal annuities for the same qualifying period of service.

- There is precedence for integration: Current law provides that up to 40 percent of an annuity paid to a surviving widow/widower under the survivor benefit plan may be offset by that part of a social security annuity paid to such person that is attributable to active military service performed by the deceased spouse.

The major argument against integrating military retired pay and social security benefits, of course, is that it will be perceived as an erosion of benefits.

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[30] DMC, p. 351.
[31] PCMC, p. 30.
[32] Bankers Trust Co., p. 7

CONCLUSION

As Federal expenditures for the military retirement system have increased, so has concern over curbing its cost. Numerous studies have recommended a restructuring of the system that promised greater efficiency and reduced costs in the long term. None of the recommendations, however, led to comprehensive changes. Thus far, cost-reduction efforts taken by the executive branch and Congress have concentrated on restraining the cost-of-living adjustments in the annuities of current beneficiaries. These efforts have appeal because they produce savings in the near term as the executive branch and Congress struggle with historic budget deficits.

In the long run, however, large-scale savings in relation to the costs associated with current military retirement policies must come through substantial revision of these policies. Past recommendations and proposals reviewed in this chapter offer a range of options still worthy of consideration. But major revisions to the system probably will not produce appreciable savings until several years in the future because the Federal Government already has incurred a substantial liability for entitlements earned by current beneficiaries and members on active service. Consequently, equity considerations will probably lead to long transition periods before new procedures are fully implemented. This should not dissuade policymakers from instituting needed changes, however.

The crux of the cost issue is the combination of 20-year retirement and service up-or-out policies. As the legislative history shows, 20-year retirement does not stem from any coherent development of a military retirement system. Yet, 20-year retirement has become the keystone of personnel management policies—in particular up-or-out policies—throughout the military services.

Whatever other purposes the military retirement system may serve, its main objective should be to support the overarching goal of manning the military services with persons capable of performing modern peacetime and wartime missions. This objective often becomes obscured by arguments over "youth and vigor" and the special nature of military service. It seems clear that this objective needs evaluation in light of the improved health and longer life expectancy of the public generally and the nature of modern military service specifically.

As this report notes, General Vessey, Chairman of the Joint Chiefs of Staff, has suggested that the requirements of modern warfare may justify changes in the military retirement system. Presumably this evaluation is part of the task of the 5th QRMC. The

Secretary of Defense reportedly has directed the study group to speed up its review of military retirement and to seek opinions from compensation experts outside DOD.

None of the past studies of the military retirement system proposed to eliminate 20-year retirement outright; but they all recommended changes that, in concept, would diminish the influence of 20-year retirement on personnel management policies and lead to reduced retirement costs. In general, the concensus approach recommended by the studies to accomplish this goal is to revise the benefit structure so that early retirement entails a penalty of a reduced immediate annuity or a deferred annuity.

According to press accounts, a staff report for President Reagan's private sector survey on cost control (PPSSCC) enunciates a similar theme. The PPSSCC task group on military retirement recommends that military personnel must complete 30 years of service to be entitled to an immediate full retirement annuity; those who retire with 20 to 29 years of service would receive an annuity starting at age 60.

Past studies of the military retirement system focused on changes to the benefit structure for future retirees, ignoring the largest part of the immediate cost problem—the cost of annuities to current beneficiaries. Recent efforts to hold down cost growth, however, have focused on current beneficiaries. Some proposals have been implemented, others have not. In conjunction with the fiscal year 1984 budget, the administration proposes to suspend fiscal year 1984 COLA's in all Federal retirement programs. It also proposes to make permanent the present temporary provision of the Omnibus Reconciliation Act of 1982 that limits COLA's for retirees under age 62 to half of the full COLA. An option not yet included either in past studies or in recent proposals is to gradually integrate social security benefits with retired pay of current beneficiaries. This proposal might merit consideration if the two benefits are integrated for future retirees.

Ultimately, Congress will have to decide on the changes, if any, that should be made to the military retirement system. This decision will have to be weighed not only in terms of savings in Federal outlays, but in terms of its implications on national security as well. The record of past inertia combined with mounting pressure to reduce Federal spending may well require the 98th Congress take an early and active role in this issue.

Appendix

Summaries of major recommendations of past study groups for changing the military retirement system

HOOK COMMISSION (1948)

Financing method:
- Annual appropriations to pay current obligations.

Minimum eligibility requirement (YOS=year(s) of service):
- *Voluntary retirement:*
    Officers:
        20 YOS and age 60
        30 YOS and any age
    Enlisted:
        20 YOS and age 50
        25 YOS and any age
- *Involuntary retirement:*
    All grades: 20 YOS, last 10 of which are continuous.

Base for calculating retired pay (RPB=retired pay base):
- Final monthly basic pay for grade in which retired.

Method for calculating retired pay (RPB=retired pay base):
- *Voluntary retirement:*
    2.5 percent of RPB per YOS.
- *Involuntary retirement:*
    Over 24 YOS: 2.5 percent of RPB per YOS
    20 thru 24 YOS: 1.25 percent of RPB per YOS, or 2.25 percent of RPB per YOS paid at age 60.

Maximum retired pay:
- 75 percent of RPB for 30 or more YOS.

Social security offset:
- Commission study took place before military service was covered.

Severance pay:
- Amount based on YOS as follows:

Amount of payment	*YOS*
½ month's basic pay per year YOS	1-4
2½ months' basic pay per YOS, plus 1 month's basic pay per YOS over 5	5-9
7½ months' basic pay per YOS, plus 1½ months' basic pay per YOS over 10	10+

(Maximum payment equal to 2 years of basic pay.)

FIRST QUADRENNIAL REVIEW OF MILITARY COMPENSATION (QRMC)
(1969)

Financing:
- Career members contribute 6.5 percent of RMC for military retirement and social security benefits. Contributions refunded to those separated before retirement eligibility.

  (QRMC proposed salary—RMC, regular military compensation—for career force consisting of basic pay, nontaxable allowances for quarters and subsistence, plus tax advantage.)

Minimum eligibility requirement (YOS=year(s) of service):
- 20 YOS.

Base for calculating retired pay (RPB=retired pay base):
- Average of highest 1 year of RMC.

Method for calculating amount of retired pay (RPB=retired pay base):
- Percentage (multiplier) of RPB for each YOS as follows:

Percent of RPB per YOS

YOS	
1-8	1.5
9-20	1.75
21-22	2.0
23-24	2.5
25-30	3.0
31+	1.5

Two step rate:

Step 1 rate: Multiplier reduced 9 percentage points. (Example: Member who retires with 20 YOS has 33 percent multiplier. Step 1 multiplier is 24 percent.)

Step 2 rate: Full multiplier restored based on YOS and age schedule. Example:

Age full

YOS when retired	*Rate begins*
20	60
25	57½
30+	55

Maximum retired pay:
- 75 percent of RPB for 40 YOS.

Social Security offset:
- Age 65. Retired pay reduced by amount of annuity attributed to military service.

Severance pay:
- Members with over 4 YOS separated for promotion failure or reduction in force paid 1 year's pay; if separated for "show cause" reasons, paid up to 6 months' pay.

INTERAGENCY COMMITTEE (1971)

Financing
- Annual appropriations to pay current obligations.

Minimum eligibility requirement (YOS=year(s) of service):
- 20 YOS for immediate retired pay. 10-19 YOS for retired pay beginning at age 60.

Base for calculating retired pay (RPB=retired pay base):
- Average of high-3 consecutive years of basic pay.

Method for calculating amount of retired pay (RPB=retired pay base):
- Percentage (multiplier) of RPB for each YOS as follows:

Percent of RPB per YOS

YOS	
1–24	2.5
25–30	3.0
31–35	2.0

Two step rate. Retired pay for a member who retires with less than 25 YOS is reduced 2 percent for each year he is under age 60. Full rate restored at age 60. Retired pay for a member who retires with 25+ YOS is reduced 2 percent for each year he is under age 55. Full rate is restored at age 55.

Maximum retired pay:
- 88 percent of RPB for 35 YOS.

Social security offset:
- Age 65. Retired pay reduced by 50 percent of annuity attributable to military service.

Severance pay:
- Members involuntarily separated with 5–19 YOS receive lump-sum payment equal to 5 percent of 12 months' final basic pay per YOS. Those with 10 or more YOS may elect to receive retired pay at age 60 or a second lump-sum payment.

RETIREMENT MODERNIZATION ACT (DOD RETIREMENT STUDY GROUP) (1974) [1]

Financing:
- Annual appropriations to pay current obligations.

Minimum eligibility requirement (YOS=year(s) of service):
- 20 YOS for immediate retired pay. 5–19 YOS for retired pay beginning at age 60.

Base for calculating retired pay (RPB=retired pay base):
- Average of high-1 year of basic pay.

Method for calculating retired pay (RPB=retired pay base):
- Percentage (multiplier) of RPB for each YOS as follows:

Percent of RPB per YOS

YOS	
1–24	2.5
25–30	3.0

Two step rate.

Step 1 rate: Multiplier reduced 15 percentage points if member retires with less than 30 YOS. (Example: Member who retires with 20 YOS has 50 percent multiplier based on formula above. Step 1 multiplier is 35 percent.)

Step 2 rate: Full multiplier restored after date member would have completed 30 YOS.

Maximum retired pay:
- 78 percent of RPB for 30 YOS.

Social security offset:
- Age 65. Retired pay reduced by 50 percent of the annuity attributable to military service.

Severance pay:
- Members involuntarily separated with 5–19 YOS receive lump-sum payment computed at 5 percent of 12 months' final basic pay per YOS and retired pay beginning at age 60 or second lump-sum payment.

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[1] The Third Quadrennial Review of Military Compensation (1976) reaffirmed the provisions of RMA.

DEFENSE MANPOWER COMMISSION (1976)

Financing:
- Accrual financing, chargeable to individual military service budget, for cost of future liabilities for members in active service.

Minimum eligibility requirement (YOS=year(s) of service):
- 20 YOS and accrual of 30 points for immediate retired pay. 10 YOS for retired pay beginning at age 60 or 65.

  (Commission suggested a plan to give point values to military jobs in relation to their combat or noncombat requirements. Combat jobs would be assigned a value of 1.5. Noncombat jobs had a value of 1. Other jobs would be given intermediate values. Retirement points are accumulated at 1/365th of the point value of a job for each day in that job.)

Base for calculating retired pay (RPB=retired pay base):
- Average of high-3 years of basic pay.

Method for calculating retired pay (RPB=retired pay base):
- 2⅔ percent of RPB for each retirement point.

Maximum retired pay:
- 80 percent of RPB for 30 retirement points.

Social security offset:
- No. Commission recommended that level of retired pay should consider social security benefits.

Severance pay:
- Members with 10 or more YOS:

  Voluntary separation:
  Paid retired pay, as computed above, at age 65 or actuarialy reduced amount at age 60.

  Involuntary separation:
  Lump-sum payment equal to 2⅔ of 24 month's final basic pay per YOS.

LEGISLATION PROPOSED BY REPRESENTATIVE LES ASPIN (1976)

Financing:
- Fund developed through 7-percent contribution of member's RMC and matching contribution by DOD.

Minimum eligibility requirement:
- *Voluntary retirement:*

Retired pay begins

YOS	*Age*
5–19	62
20–29	60
30+	55

- *Involuntary retirement:*
  5 YOS (see section on severance pay).

Base for calculation retired pay (RPB=retired pay base):
- Average of high-3 years of RMC.

Method for calculating retired pay (RPB=retired pay base):
- Percentage (multiplier) of RPB for each YOS, as follows:

Percent of RPB per YOS

YOS	
1–5	1.5
6–10	1.75
11+	2.0

Maximum retired pay:
- Dependent on YOS at retirement.

Social security offset:
- Not decided.

Severance pay:

- Members with 5 or more YOS involuntarily separated receive immediate retired pay reduced by $1 for each $2 of earned past-retirement income.

PRESIDENT'S COMMISSION ON MILITARY COMPENSATION (1978)

Financing:

- Fund developed by annual appropriations covering future liabilities for members in active service. Annual appropriations to pay current retired pay liabilities until paid off.

Minimum eligibility requirement (YOS=year(s) of service):

Retired pay

YOS	*Age*
10–19	62
20–29	60
30+	55

(Federal civilian service also could be counted if member had at least 10 years of military service.)

Base for calculating retired pay (RPB=retired pay base):

- Average of high-3 years of basic pay.

Method for calculating retired pay (RPB=retired pay base):

- Percentage (multiplier) of RPB for each YOS, as follows:

Percent of RPB per YOS

YOS	
1–5	2.0
6–10	2.25
11–35	2.75

Maximum retired pay:

- 90 percent of RPB for 35 YOS.

Social security offset:

- Age 65 or 62 if social security is elected early. Retired pay reduced by 1.25 percent of initial primary benefit per YOS. Reduction may not exceed 50 percent of retired pay.

Severance pay:

- Members involuntarily separated with 5 or more YOS paid one quarter month's final basic pay for each YOS through 10½ month's final basic pay for each YOS from 11 through 30. Maximum payment limited to 1 year's basic pay and not payable to anyone entitled to retired pay.

Deferred compensation:

- Establishes a deferred compensation trust fund for *active-duty* members with more than 5 YOS. Purpose of fund is to provide for transition from military life. Fund financed by Government contributions at rates shown below and accumulates at interest.

Government contribution schedule:

Percent of basic pay

Member's YOS	
6–10	20
11–20	25
21–25	15
26–30	5

Members who complete 10 YOS are entitled to withdraw up to 50 percent of fund while on active duty. Upon leaving active duty, members may leave funds in account to withdraw at later date or convert to a monthly or annual annuity for no less than 2 years.

UNIFORMED SERVICES RETIREMENT BENEFITS ACT (1979)

Financing:

- Fund developed from annual appropriations covering future liabilities for members on active duty. Annual appropriations to pay current retired pay liabilities until paid off.

Minimum eligibility requirement (YOS=year(s) of service):

- 20 YOS for immediate retired pay. 10-19 YOS for retired pay beginning at age 60.

Base for calculating retired pay (RPB=retired pay base):

- Average of high-2 years of basic pay.

Method for calculating retired pay (RPB=retired pay base):

- Two step rate:

Step 1: Percentage (multiplier) of RPB for each YOS, as follows:

Percent of RPB per YOS

YOS	
1-10	1.75
11-20	2.0
21+	2.75

Step 1 rate applies until age 60 when step 2 rate applies.

Step 2: Percentage (multiplier) of RPB for each YOS, as follows:

Percent of RPB per YOS

YOS	
1-5	2.0
6-10	2.25
11+	2.75

Maximum retired pay:

- *Step 1:* 76.25 percent of RFB at 36 YOS.

Step 2: 76.25 percent of RPB at 30 YOS.

Social security offset:

- At age 65 or 62 if social security is elected early. Retired pay reduced by 1.25 of initial social security benefit per YOS, not to exceed 50 percent reductions.

Severance pay:

- Members involuntarily separated with 5-19 YOS paid lump-sum payment equal to 5 percent of 12 month's final basic pay per YOS. Members with 10+ YOS can elect combination of severance pay and cash withdrawals (see below) in lieu of retired pay at age 60.

Cash withdrawal payments:

- Members separated with 10-19 YOS may elect a cash withdrawal payment(s) in lieu of retired pay starting at age 60. Such payment is based on 1 month's basic pay for the first 10 YOS and 2 month's basic pay for the next 5 YOS for a maximum of 20 month's of basic pay. Retired pay entitlement may be reinstated by paying back amount of cash withdrawal.

Members with 20+ YOS may also elect a cash withdrawal payment(s) computed at same rates. Any amount withdrawn must be refunded either by repayment before receiving retired pay or through reductions in retired pay.

Chapter VII

Railroad Retirement: Can the Oncoming Disaster Be Sidetracked?

by

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Acknowledgment

Credit must be given to numerous people at the Railroad Retirement Board for assistance throughout this project, but especially Norman Solomon for actuarial projections and Charlene Hoferle for precise written explanation of accounts within the Board's jurisdiction. Richard Rimkunas produced the charts and Brenda Freeman typed the report.

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RAILROAD RETIREMENT: CAN THE ONCOMING DISASTER BE SIDETRACKED?

FINANCIAL PROBLEMS IN RAILROAD RETIREMENT

(A) Introduction

The railroad retirement system (RRS) is a federally legislated, retirement system providing retirement, survivor, and disability protection for workers with at least 10 years of railroad employment. The system is financed by employee and employer contributions to a trust fund and by reimbursement from the social security system for obligations of that system paid by RRS. In addition, some RRS beneficiaries receive a benefit paid from a separate account financed directly from general revenue appropriations. That benefit, called a "windfall," is paid to a closed group of persons who acquired certain benefit rights from both RRS and social security prior to 1975. Altogether, the Railroad Retirement Board (RRB) in the fiscal year 1982, the Federal agency responsible for administering RRS, distributed to nearly 1 million beneficiaries, approximately $5.5 billion in retirement benefits, and received approximately $4.9 billion in revenues for that program. The Board also paid $346 million in unemployment and sickness benefits and received taxes of $181 million to the railroad unemployment insurance account (RUIA). Under current law, this difference of $165 million is drawn from the main railroad retirement account, further contributing to that account's financial problems.

As of the end of calendar year 1982, the railroad retirement reserve had dropped to $80 million. The RUIA was in arrears to the railroad retirement account by $360 million. A limited borrowing authority for the main account has been activated to pay checks due February 1, 1983. Although that loan of $370 million and loans in subsequent months are to be repaid in June 1983, the Board's actuary estimates that borrowing will resume as early as October 1, 1983, and that the authority to borrow would be exhausted before payment of checks on May 1, 1984.

The administration projects a combined deficit of $1.1 billion in the railroad retirement and railroad unemployment accounts for fiscal year 1983. The fiscal year 1984 budget presumes that, because of current law, benefits paid from RRS will be reduced $532 million in fiscal year 1984 and $1,429 million in fiscal year 1985. Under current law, benefits in the industry portion of RRS must be cut to avoid insolvency; across-the-board cuts to that benefit of more than one-third are scheduled for October 1, 1983. Railroad labor and management representatives are attempting to reach agreement about measures to avoid the October 1 cuts.

The underlying causes of RRS financing difficulties can be traced to the history of the system, and to pension financing practices that preceded its establishment in the 1930's.

During the latter 19th and early 20th centuries, as the population drifted toward urban industry, the problems of aged and disabled workers increased in size and complexity. Gradually, however, growth and competition made rational provision for aged and disabled retirement both possible and necessary. With schemes evolved from traditions of humane responsibility to faithful employees and collective relief to needy acquaintances, railroad companies and their workers took the first steps toward genuine systems of old-age security. Yet, railroads, the first giants of industry, were not themselves immune to financial hardship. As the country endured the Great Depression, social philosophers extended the concept of collective self-help to national dimensions, and the Federal Government began to search for ways to organize old-age assistance. As Congress considered responses to this growing national concern, the rail industry, which had pioneered formal old-age assistance half a century earlier, pressed for, and received, a federally administered contributory retirement system for the entire industry.

The railroad retirement system (RRS) occupies a corner of the Federal budget because Congress assumed a responsiblity for establishing agreements between affected and conflicting interests. The combination of social insurance and ordinary pension features contained within its benefits and financing structure were the culmination of two generations of commitments made insecure by economic adversity. Yet, RRS remains outside the basic public arrangements securing retired worker income—social security and the Employee Retirement Income Security Act (ERISA). The following paper is based upon the view that the combination of historical, economic, and political imperatives reaching expression in social security and ERISA were already long at work in railroad retirement plans and were inseparable at that time. Eventually, it became possible and desirable to separate the social security aspect of RRS and that was accomplished through major restructuring of RRS in 1974. The remaining issues in RRS benefits and financing are those which drove ERISA legislation: how can private pension benefits be secured?

This, then, is the structure of the discussion:

- Industrial society diminished the traditional methods for caring for the aged or disabled, and made necessary and possible a new set of arrangements;
- Two basic forms of those arrangements evolved. First, employers developed formal plans for continuing a portion of salary. Second, employees formed collective self-help schemes;

- Each had fundamental flaws because both were paid from revenues available at the time of payment. Employer plan security depended upon the disposition and financial health of the employer, employee plans depended upon the number and age mix of employees. Neither type of sponsor had compelling incentives to finance their plans on a sound basis, and in fact had strong reasons for doing otherwise;
- Because railroads were the first "big businesses," these plan types first evolved and first reached critical stages of development in the rail industry; and
- The Federal Government responded to the challenge by (1) organizing railroad pension rights under Federal authority, (2) establishing a social security system with society-wide application, (3) legislating, after a generation had passed, a set of rules (ERISA) to prevent these problems from recurring.

Thus, as the railroad industry diminishes and railroad employment declines, the original problems of railroad industry pensions reemerge. Given the changes that have occurred over the years in the Federal Government's commitment to, and regulation of income security for the aged, the following questions arise:

- What changes could be made to the structure and benefits of RRS that would be consistent with Federal involvement in old-age income security?
- What modifications to RRS financing are possible and desirable, given the health of the industry and the declining number of railroad employees?
- If the necessary financing cannot be acquired from within the industry, Congress will either have to consider other sources of revenue, or RRS benefits will be precipitously and significantly reduced as of October 1, 1983. Given the Federal Government's involvement in private pension benefit security, what is the appropriate response to this oncoming disaster in RRS financing?

(B) Railroad Pension Financing: Historical Review

(1) Early Railroad Pensions

The rail industry is credited with developing the Nation's first pensions. Railroads, the first of the "big" businesses, found it to their competitive advantage to establish humane retirement provisions for career workers. Evolving from earlier case-by-case awards, rail company pensions originated in the 1870's and covered nearly all employment in the industry by the 1920's. However, because of breaks in service, only about 18 percent of workers ever qualified for benefits, and those benefits were often low. In addition, because these company pensions were financed out of current revenues, and were under the complete control of the company sponsors, benefits could be reduced or suspended as suited company interests.

Partially in response to these factors, and evolving out of a tradition of collective self-help, rail unions entered the pension field, first in the 1880's with rapid expansion occurring after the turn of the century. However, because these plans were financed by contributions from current workers, within a generation union plans became vulnerable to economic cycles, work force decline, and misguided pressures to improve benefits without increasing contributions.

With the onset of the Great Depression, commercial activity declined and was reflected in lower demand for railroad transportation. The Depression, coupled with increased competition from other transportation, reduced revenue to rail companies and threatened many with bankruptcy. As a result, rail plans cut benefits for retirees.

Union plans also faced serious difficulties. Many were converted to insurance plans with much lower benefit schedules. Some failed or were threatened with failure. Older workers became reluctant to retire. The depression caused a decline in employment; seniority rules meant younger workers were laid off first. Therefore, just as demands for pension were increasing because of the aging of the participants, younger workers upon whom the plans depended for financing were losing their jobs, in part because older workers could not retire. Thus, railroad labor organizations pressed Congress to establish a secure pension so that older workers could retire and make room for younger workers who had lost or were in danger of losing their jobs.

(2) FEDERAL RAILROAD RETIREMENT

Congress established a federally administered railroad retirement program in 1937 after two previous attempts were declared unconstitutional. It excluded rail workers from social security so that credit could be granted under the new system for past service. In contrast, social security was originally designed for prospective credit only.

Three consequences followed from the birth of RRS as an industry retirement plan. First, the provision of past credit diminished the need for coverage by social security, and actually worked against rail employment's coverage by social security, given the complexity of sorting out any overlap in rights that would have resulted. Second, even though RRS pooled risks, the view that RRS was a retirement pension and lacked the social insurance aspects of social security led to pressure to add provisions to RRS that compensated rail employees for the absence of social security insurance protection. Third, because RRS began with outstanding liabilities, any additional funding that would have been necessary to fund accruing rights would have required taxes sufficient to pay both current benefits plus future benefits primarily out of current revenues. Had revenues of that magnitude been available in the industry for the payment of rail pensions, action by Congress in the railroad pension area probably would have been avoidable.

Amendments after 1937 incorporated into RRS social insurance features similar to those found in the social security program. In 1946, social security and railroad retirement began a process of coordination, whereby survivor benefits similar under both systems would be payable only by the system with determined jurisdiction. In 1951, this coordination was expanded to include: (1) a provision for transferring to the social security program any credits earned by employees who died or retired with less than 10 years' service in the railroad industry; (2) a guarantee that RRS beneficiaries would receive at least as much from RRS as would have been received from social security had all their railroad service been covered by that program; and (3) the establishment of a "financial interchange" (FI) between the systems that balanced any shared benefit and tax experience of the two systems.

(3) The Problem of Dual Entitlement

The RRS paid benefits to railroad workers with railroad service prior to 1937, thereby enabling older workers to retire even though they had relatively little employment after the system's enactment. In 1950, amendments to social security addressed a similar problem for workers with credit under that program by establishing a "new start," thereby permitting workers with short service covered by social security to qualify for immediate benefits based upon average covered earnings.

Inevitably, the introduction of the new start provisions under social security and the benefit structure of RRS meant that many workers who left the industry were qualified for benefits under both systems. The new start provisions were an alternative to granting credit for service prior to the establishment of social security, and, in effect, served the same purpose as granting credit under RRS for prior service at the origin of that system. Thus, the argument was advanced that RRS beneficiaries with benefits based upon credit prior to 1937 should not receive both RRS and social security benefits.

Actually, the problem of dual entitlement had been recognized in 1946, when Congress amended the Railroad Retirement Act to provide survivor benefits. The 1946 legislation stipulated that survivor benefits based on the earnings records of one employee could be paid under either RRS or social security, but not under both. However, the 1946 legislation had been concerned with establishing survivor protection for rail employees similar to survivor provisions of social security without overcompensating survivors of employees who left the rail industry and had worked a sufficient time under social security to be insured for survivor benefits. With the decline in rail employment during the early post-war period, and the enactment of new start provisions in social security, the problem of employees' qualifying for both RRS and social security became an issue of more widespread application.

In 1951, the coordination with social security was expanded to include: (1) a provision for transferring to the social security program any credits earned by employees who died or retired with less than

10 years service in the railroad industry; (2) a guarantee that RRS beneficiaries would receive from RRS at least as much as would have been received from social security had all their railroad service been covered by that program; and (3) the establishment of a financial interchange between the systems that balanced any shared benefit experience of the two systems. Thus, the principle was established that both rail employees and the social security system were to be put in the same financial position they would have occupied had railroad service been covered by social security since 1937.

The 1951 amendments dealt with the problems created by employees with careers in and out of the rail industry in two other ways. First, rail employees who had not acquired 10 creditable years of service under RRS by the time they reached retirement had their rail service transferred to social security for use in that program's benefit computation. Because they had paid substantially higher taxes to RRS as railway workers than they would have paid to social security, Congress established a payment called "residual lump sum," which assured that a rail employee (or his estate) would receive at least the value of all of his contributions to RRS (plus interest, minus social security benefits based on rail employment).

Second, restrictions were added to prevent workers with mixed careers sufficient to qualify them for benefits under both RRS and social security, from receiving advantages in the respective benefit formulas intended to improve benefits for workers who retired shortly after enactment of the programs. RRS had granted credit for wages earned prior to 1937; benefits were thus computed for wages upon which no taxes to RRS were paid. Social security provided a formula enhancement for workers relatively advanced in careers when social security was enacted in 1935. The 1951 amendments eliminated, at least partly, the opportunity to collect benefits from both systems on the basis of the untaxed service before 1937 by reducing the RRS benefits of dually entitled retirees by the amount of the annuity based upon untaxed service or by the social security benefit, whichever was less.

To rationalize the shared responsibility of the two systems, "a financial interchange" (FI) was established between social security and railroad retirement that measured and exchanged the value of taxes paid and benefits received by individuals with coverage under both programs. This transaction reflected financial experience of the two systems with respect to individuals who had paid taxes to both systems and who had received benefits from either or both systems. Social security trust funds were to be "held harmless" in this transaction, that is, the computation would be guided by an assumption that all rail service after 1937 had, in effect, been covered by social security for any employee whose work career involved dual coverage.

The 1951 legislation improved the treatment of some workers who left the rail industry with less than 10 years service, but generally these employees lost the value of the contributions to RRS made in their behalf by their employers. In addition, a clear inequity was accepted in the treatment of workers with slightly fewer than 10 years rail service compared with workers with slightly more than 10 years. Benefit rights based on combined employer and employee contributions substantially exceeded, for the 10-year worker, the combination of a residual lump sum payment and social security benefits earned through rail service by employers with slightly less than 10 years rail service.

The savings to RRS from introduction of a 10-year vesting requirement and from restrictions on dual entitlements, plus the revenue from social security (representing savings to that program for social insurance benefits paid by RRS) allowed improvements in the benefits of remaining RRS beneficiaries. Thus, the 1951 amendments appear to have reaffirmed the sense in which RRS was to be considered a pension in behalf of career railroad workers; workers who left the industry lost benefits values that were in turn redistributed to those who remained.

In 1954, dual benefit restrictions were removed for RRS retirees, a year later similar restrictions were removed for survivors. In 1968, these restrictions were also removed for spouses. During the 1953 hearings that led to enactment of the 1954 legislation, the concept of dual entitlement restriction was attacked as unfair to employees who had left the industry, and it was further argued that the restriction, by offsetting a portion of RRS benefits for retirees receiving social security, had violated the principle that benefits once granted should not be reduced. A coalition of RRS retirees and representatives of the operating unions supported the repeal of the restriction. The Railroad Retirement Board (RRB), the Association of American Railroads, and the Railway Labor Executives' Association (representing 80 percent of railroad labor) were opposed. In general, opposition was based on arguments that: (1) inequities would be created by allowing individuals to collect benefits from two systems for a period of service in which taxes had been collected by neither; (2) repeal would be costly; and (3) if liberalizations were to be made, they should be made in behalf of career employees.

During the next two decades the RRS was repeatedly modified to accommodate various changes to social security, especially by increasing benefits whenever social security benefits were increased. These increases were generally not matched with adequate tax increases.

(4) THE RAILROAD RETIREMENT ACT OF 1974

The present structure of the RRS originated from the 1974 act, which reorganized the system to deal with two crucial problems that were causing large deficits in the RRS trust fund.

First, prior to the 1974 act, entitlement to benefits from social security and RRS resulted in unintended benefit advantages for some dual beneficiaries. These advantages were paid by RRS, but occurred because of employment under social security. This difference between the combined benefit received from both systems and the amount that would have been received had the benefit been calculated on combined earnings under social security has been called a "windfall."

The second major problem addressed by the 1974 act was the system's method of dealing with inflation. To compensate retirees, on the rolls and at retirement, for the effects of inflation, the multiplying factors in the benefit formula had been periodically increased to reflect inflation before and after retirement. In addition, higher wages were resulting in higher benefits at retirement. In effect, because of the wage increases and formula adjustments, new retirees were compensated twice for the same inflationary pressure. The RRS trust fund could not continue to finance this escalation in annuities, and Congress stepped in.

Generally, the reorganization in 1974 established three benefit components. The system was divided into two "tiers," one of which roughly approximated social security (tier I), and the other, a staff retirement benefit (tier II). For employees with at least 10 years of railroad service, the first tier pays benefits based upon combined railroad industry and any social security covered earnings and is financed by a tax on rail employees and employers equal to that paid on payroll covered by social security. Tier II was designed to approximate the structure of a private industry pension plan with benefits related to service in the railroad industry and financed by taxes on industry employers. Employees with less than 10 years of rail employment do not qualify for RRS benefits; ultimately these employees receive benefits from social security, with rail service combined with their social security covered work history. Because it bases benefits on combined earnings, tier I has eliminated the opportunity for employees to qualify for windfall benefit awards arising from dual entitlement unless they became entitled to such windfalls prior to 1975.

In addition, a third component was added to partly preserve windfall advantages to certain employees who became entitled to them before 1975 and who would have received those advantages had the system not been reorganized. Through this windfall provision, employees and retirees already eligible to receive windfalls had those rights "grandfathered." This component was to be financed by Federal Government general revenues.

(5) 1981 LEGISLATION

Primarily because of continuing decline in industry employment, RRS revenue did not keep pace with benefit growth. In 1981, Congress enacted legislation based on a labor-management agreement to raise taxes and modify benefits. In addition, because of uncertainty about the timeliness and adequacy of appropriated reimbursements for windfall payments, those payments were placed into an account separate from the main RRS account and made directly dependent on appropriations. And, as part of the effort to avert a short-term cash flow problem, Congress gave RRS authority to borrow from the general treasury against financial interchange payments due from social security. This borrowing authority contained a "trigger." When 50 percent of the available amount was borrowed, the trigger required notice and action to prevent system insolvency before 100 percent of the borrowing authority was exhausted.

(a) Changes in the Windfall Benefit

Under the 1981 legislation, windfall benefits no longer are adjusted to award for the compounded value of any social security COLA occurring since January 1975 and the date of retirement, but are limited to compounded social security COLA between January 1, 1975, and January 1, 1982. These benefits continue to be frozen at retirement and thus have, in the face of continuing inflation, a diminishing real value over time and represent a smaller portion of the total benefits received by those beneficiaries eligible for such windfalls.

In addition, Congress ended any additional awards of windfall benefits to spouses. These two changes ended most uncertainty about future windfall costs by eliminating any adjustments for inflation and by clarifying the number of eligible beneficiaries.

The new law removed the obligation to pay these windfall benefits from the main RRS fund, by creating a separate "dual benefit payment (windfall) account." This change eliminated a major cause of reserve erosion in the railroad retirement account.

Under the 1974 act, the trust fund was to be reimbursed from the general treasury on a level payment basis for these windfall payments. Payments were expected to be higher than reimbursements in the early years of the level pay schedule and lower in the later years, because of deaths of eligible beneficiaries. However, the practical effect of appropriations too small to fully reimburse the fund for current windfall payments was to draw down the fund by the unreimbursed amount. In addition, appropriations were not sufficient to amortize the obligations on a level payment basis. By 1981, the difference between windfall payments and appropriated reimbursement reached $127 million annually; by December 31, 1982, the accumulated shortfall (including lost interest) had reached $1.7 billion.

In a sense the creation of the dual benefit payment account was a key to any resolution of the RRS financing crisis. Refinancing required a combination of tax increases and benefit cuts. Confronting industry negotiators was the tricky question: If cuts are to be made, should those cuts apply to benefits for which all participants are eligible and to which all workers contribute, or should they apply to a benefit for which only some participants are eligible and which is supposed to be financed from general revenues, even if that were to mean a cut to current beneficiaries? In effect, because the RRS trust fund was subsidizing windfall payments, the old system was pitting interests of a growing number of younger workers against the interests of a decreasing number of older workers and retirees.

(b) Fiscal Year 1982 Appropriations Actions

Ultimately, the decision to place windfalls into a separate account subject to appropriations allowed labor and management to negotiate a package of benefit changes and tax increases. It also resulted in considerable uncertainty over windfall benefit amounts as Congress sought to complete work on fiscal year 1982 appropriations. First, because action had not been completed by the date at which payments from the separate account were to begin, the RRB, the Federal Agency responsible for administering RRS, had to base benefit levels upon two guideposts—the administration request of $350 million for windfall payments, and House Appropriations Committee action. On September 23, 1981, that committee reported an appropriation of $350 million for windfalls for fiscal year 1982.

Thus, the Board issued checks beginning in October at a level reflecting an anticipated appropriation of $350 million, or 21 percent less than the $440 million needed to pay benefits at the full amount the entitlement formula provided. This 21-percent cut resulted in an average $20 per month cut for approximately 389,000 beneficiaries.

Windfall payments remained at the 21-percent cut level for the remainder of calendar year 1981. In January 1982, because of an increase in a continuing resolution, windfall checks increased to a reduction level of 15 percent.

The 1981 legislation left unresolved whether the level payment amortization to the main RRS account should continue until all Federal obligations for payment of windfalls as provided by the 1974 act have been retired. The legislation stipulates only that windfall benefits will be paid from a separate account funded annually by appropriations, presumbly an amount equal to windfall reimbursement, and that the amount of each beneficiary's windfall value will be prorated to reflect the aggregate available amount in the separate account. Rail labor and management regard the $1.6 billion difference between post-1974 act windfall payments plus interest, and reimbursement from general fund appropriations to be an outstanding Federal obligation to the RRS trust fund.

The following table projects needed amounts to fully fund windfall benefits and the number of windfall recipients through the year 2025.

Table 1.—WINDFALL BENEFIT PAYMENTS AND AVERAGE NUMBER OF WINDFALL BENEFICIARIES

[Dollars in millions]

Fiscal year	Windfall benefits [1]	Average number of beneficiaries
1982	$440	379,000
1983	430	352,500
1984	415	328,100

Table 1.—WINDFALL BENEFIT PAYMENTS AND AVERAGE NUMBER OF WINDFALL BENEFICIARIES—Continued

[Dollars in millions]

Fiscal year	Windfall benefits [1]	Average number of beneficiaries
1985	395	306,400
1986	375	286,000
1987	355	267,000
1988	340	248,500
1989	320	230,300
1990	300	212,800
1991	280	195,900
1992	265	179,800
1993	245	164,500
1994	230	150,000
1995	210	136,400
1996	195	123,500
1997	180	111,600
1998	165	100,400
1999	150	90,100
2000	140	80,700
2005	85	45,000
2010	50	23,500
2015	25	11,400
2020	10	5,000
2025	5	1,900

[1] Assumes full funding of the windfall benefit.

Source: Railroad Retirement Board, 15th Actuarial Valuation.

(c) Borrowing Authority

The refinancing effort of 1981 was intended to restore a measure of long-term financial stability to RRS. In addition, a solution to the short-term cash flow problem was necessary. The amount of funds needed to avert possible shortages in the near future could not be raised within the rail industry itself. Even with a correction in the actuarial deficit sufficient to restore a proper relationship between estimated *long-term* revenue and benefits, savings arising from proposed benefit reductions would not have improved financial operations fast enough to restore adequate reserve levels sufficient to avoid shortages in the *near term.*

With a short-term cash flow crisis a very real possibility, the industry looked to the relationship with social security as a source for funds in the event of a reserve shortfall—a kind of overdraft protection. Because social security was afflicted with serious financing difficulties of its own, RRS was unable to secure payment of its expected annual amount (estimated at $1.4 billion currently) either in advance or on a current basis. Therefore, it was proposed that if RRS reserves dropped below the amount needed to pay benefits in months prior to the actual transfer of funds from social security, the money needed would be drawn from the general treasury and repaid to the general treasury automatically when the FI payment was actually made.

(d) Benefit Preservation

Congress added a mechanism to avert full borrowing. The mechanism, known as section 22, is a feature called "benefit preservation," and it has three major parts:

(1) The RRB, the Federal Agency responsible for administrating RRS, must notify Congress and the President whenever borrowing authority will exceed 50 percent of the available amount. This notice will include:

(a) The total amount needed and total amount available;

(b) The first year benefits would exceed funds including all borrowing authority; and

(c) The change in the benefit/revenue relationship (expressed as a percent of payroll) necessary to prevent insolvency.

(2) Not later than 180 days after such notice:

(a) Representatives of rail management and labor must submit, jointly or separately, refinancing proposals to Congress and the President; and

(b) The President shall submit to Congress recommendations for resolving the crisis, including a plan to phase out Federal responsibility for RRS by covering rail employees and retirees by social security and requiring the rail industry to assume responsibility for all other remaining components of the pension plan.

(3) Not later than 180 days after the "benefit preservation" feature is activated, the Board would announce the method for allocating reserves in any month in which inadequate funds precludes full payment of all benefits, with highest priority given to the payment of social security benefits.

(6) FISCAL YEAR 1983 BUDGET PROPOSALS

As part of its fiscal year 1983 budget, the administration proposed the rapid dismantling of RRS. If enacted, beginning in October 1982, all subsequent rail employment would have become directly covered by social security. Any benefits now paid by RRS that duplicate benefits which would have been paid by social security had all rail employment since 1937 been covered by social security would have been paid directly from that program. With the exception of windfalls, all remaining benefits were to be classified as industry pension benefits and would have been administered thereafter by a new entity, a federally created "private rail industry pension corporation." Windfall benefits were to continue to be administered by a Federal agency, perhaps the Treasury Department or the Social Security Administration (SSA). No action was taken on this proposal.

The administration also proposed a reduction in RRB personnel—apparently this reduction was to occur primarily in the number of Board employees working in field offices administering RRS functions at the beneficiary level.

Congress also considered a Senate Budget Committee proposal to block the COLA due in June 1982 and limit COLA to 4 percent for fiscal year 1984 and fiscal year 1985. In an amendment to the first concurrent resolution on the fiscal year 1983 budget, the Senate rejected the COLA limits and restored full funding for windfall payments and for personnel for the RRS field service.

In separate appropriations actions, Congress restored money for full payments of windfalls for the last two payments in fiscal year 1982 and provided for full payments for the term of the resolution to continue spending at fiscal year 1982 levels during the first quarter of fiscal year 1983. The appropriations actions also contained language continuing RRB personnel levels. Subsequent action provided for full windfalls for the remainder of fiscal year 1983.

(C) Financing Railroad Retirement: Theoretical Review

Financing a retirement system requires an acknowledgment of long-term costs as well as appreciation of the more immediate demands which prompt its establishment. There are two polar strategies in pension financing, and, of course, a multitude of variations of each. At one pole, is the strategy of paying all pension costs as they come due, otherwise known as "pay-as-you-go" financing. At the other pole are arrangements whereby all benefits payable are funded as they are earned, or "advance funding." Advance funded plans attempt, through a specific schedule of payments, to amortize all past service liabilities or accrued benefit rights, and pay the full cost of benefit rights for current employees as they are accruing.

(1) Issues in Intergenerational Financing of Railroad Retirement

Railroad retirement evolved from ad hoc collections and direct payments; both are pay-as-you-go arrangements. The move to create a pay-as-you-go pension financed out of current revenues and/or by worker contributions was initially supported by all parties—employers and both younger and older workers. Aside from any altruistic motives which might have been present, however, the immediate interests of these groups were significantly different—employers were able to limit the amount of "hard" current dollars rendered unavailable for other uses; older workers had a transparent interest in securing an adequate level of retirement income for their twilight years; and younger workers were concerned about the security of current jobs, a security much improved if older workers could be encouraged or even required to retire.

In the beginning, the "intergenerational transfer" aspect of pay-as-you-go financing appealed to both the young and the old. Over time, however, the transfer created uncertainty as subsequent generations of workers began to doubt the wisdom of the commitments their predecessors made in their behalf. In the early years after a generational bargain is struck, everyone receives the outcome desired—retirement income for the aged, more jobs for younger workers, and costs distributed widely. As time goes by, more workers retire, aggregate demands for payment increase, the per capita obligation on workers rises. If the work force declines, the problem becomes more acute. Until a balance is achieved, that is until the natural attrition of workers is stabilized, and the number of beneficiaries reflects the lifespan and work histories of a relatively level number of employees across generations, pay-as-you-go pension arrangements are precarious. Adverse pension plan conditions of many sorts—economic cycles, declining need for workers, or what in all other respects must be considered a positive achievement, a lengthening of the span of life—are recurrent threats for pay-as-you-go pensions that can be met only with greater revenue. When pension costs rise, pay-as-you-go systems become burdensome for employers, who, in order to maintain constant benefit levels, must commit more in current operating expenses, regardless of the financial health of the business.

RRS would not have appeared to present an increasing burden had employment remained constant; that employment declined meant the tax rate had to climb—always an unattractive change. However, unless declining employment is a symptom of a declining industry, it cannot be argued that its impact is the same for both employer and employee pension plan sponsors. Industrial organizations are entities with a range of flexibility in income and outgo unavailable to workers. Furthermore, declining employment may improve the financial health of these organizations and make them more able to pay correct benefit demands—demands that in the short run are unaffected by employment decline. On the other hand, employment decline means each remaining employee pension sponsor must pay more to sustain the same level of benefits. Thus, the number of workers relative to the number of beneficiaries is critical. In 1950, there were two workers for every beneficiary. In 1983, there are three beneficiaries for every worker.

If the system is partially or wholly financed by employee contributions, increased costs can be met only if remaining workers are willing to part with larger amounts of their salaries. Eventually, this increasing demand on current incomes is met by resistance as the shared objectives present at the beginning of the plan are replaced by the conflict in later objectives. Older workers and retirees believe they have "earned" the right to benefits—expectations acquired by years of paying taxes to support earlier beneficiaries—even though taxes collected over the years of their employment were not sufficient to build a fund to secure their payment. On the other hand, even though their taxes may be more than sufficient to pay for all of their own benefit expectations, younger workers begin to become skeptical about receiving those benefits. If taxes must be raised to avoid benefit cuts younger workers are in a double bind. Their take-home pay must go down to support benefits at current levels; if benefits are cut to limit tax increases their future benefits are worth less.

From its beginning, for several reasons, RRS has been financed at a level far below full funding. First, RRS evolved from the pension practices which preceded it—pay-as-you-go financing prevailed in both employer and union plans. Thus, expectations existed for benefits based upon service credits for which no funds had been set aside. Second, some of the support for Federal legislation was based upon the belief that credit for past service could be granted, thereby encouraging older workers to retire and make way for younger workers. Third, to pay for past credit and to fund accruing credit in advance would have required substantially higher contributions; if such amounts could have been generated within the industry at the time, it is uncertain that congressional action would have even been taken. Fourth, the "aura of perpetuity" associated with Government as an entity seemed to imply that Federal authority to tax payroll at necessary rates and to control benefit growth was sufficient guarantee for benefit rights in the absence of full advance funding. Finally, the existence of reserves is often thought to be an inducement for some individuals to press for benefit liberalizations. Thus, the natural resistance to tax increases is strengthened by a fear that if contributions to the pension are greater, benefit liberalizations will be the result, requiring still further tax increases, and so on.

(2) Entitlement Rights Versus Pension Rights

As can be seen by the previous discussion of funding practices, railroad company and union plans led to benefit insecurity, which in turn led to Federal administration of railroad retirement. Yet, Federal action did not change the nature of railroad pension financing; it merely established a common benefit and revenue structure backed up by Federal law. What had been a struggle between competing but disparate interests now became a struggle between consolidated and formalized interests.

In this context, it is useful to consider the principal philosophy underlying the Employee Retirement Income Security Act (ERISA). Under ERISA, plan sponsors are to be prevented from promising more benefits than they can deliver, while required to deliver all benefits they promise. This principle is manifest in the funding requirements of ERISA, and in the contract rights granted to plan participants.

Thus, in private pension plans, a strong relationship must exist between the value of assets held and the value of benefits which will be paid from the pension fund. ERISA requires employers to contribute to pension plans they sponsor, amounts sufficient to fund retirement costs attributable to the current year, and amounts sufficient to fund any additional unfunded liabilities over a specified period. Before ERISA there were generally no minimum governmental requirements for sponsor support to private pension plans. In fact, when a plan was terminated with insufficient assets, the sponsor's legal liability was limited to the assets in the pension fund supporting the plan.

The enactment of ERISA provides greater assurance that employees will receive benefits as expected. If a private pension plan is terminated with insufficient funds, vested benefits up to certain limits are insured by the Pension Benefit Guaranty Corporation (PBGC). The requirements imposed by ERISA upon private pension plans are intended to safeguard benefits which could be endangered by inadequate funding or business failure.

In contrast to the contractual rights employees in private pensions enjoy, the rights possessed by RRS participants are essentially political. Because RRS benefits are entitlements, they are subject to congressional action which defines the eligibility for and the amount of the entitlements. Accrued private pension rights cannot be reduced (except under certain conditions related to accrual prior to ERISA, or if benefits of insolvent plans exceed PBGC limits) unilaterally by employers and cannot be bargained downward by employee representatives. In contrast, the entitlement rights earned through railroad employment are not guaranteed by ERISA, but are protected by Congress. Consequently, RRS rights are subject to change as Congress determines necessary. To the extent that Congress enacts legislation agreed upon by rail labor and management negotiators, RRS benefits can be reduced through collective bargaining. Whereas private pension beneficiaries have recourse to legal action when their benefit rights are threatened, RRS beneficiaries must make their case politically, in the hope that their interests will prevail over the interests of either labor or management or both.

(3) SUMMARY

The railroad retirement system is not subject to ERISA and has no fund to assure continuation of payments. RRS is a federally administered entitlement, financed on a pay-as-you-go basis through bargains collectively struck and then enacted in Congress, and is inevitably balanced between competing interests—employers, current workers, retirees, and the railroad public. In order to assure continued payment of all benefits, a pay-as-you-go pension requires that: (a) employers meet plan costs out of current expenses—possible only if the employers themselves are sufficiently prosperous—or (b) employees willing to pay sufficient contributions—possible only if the work force remains stable or remaining employees pay higher contributions. Adequate funding for retirement benefits has always been difficult to achieve in the railroad industry, which has many marginal enterprises and declining employment opportunities. Inevitably, then, increasing RRS financial burdens will raise questions about the relative merits of benefit reductions or tax increases—on employers or employees or both. Alternatively, Congress can consider other forms of revenue. Benefit cuts and employee tax increases lower the standard-of-living of retirees and workers. Increased taxes on employers may either raise consumer costs or diminish overall railroad operations. Other forms of revenue simply pass the costs on to the general public.

(D) Financial Condition of Railroad Retirement

The RRS is once again threatened with insolvency as it was in 1981. In spite of changes enacted in 1981, the chief actuary of the RRB has projected that RRS would be unable to meet all demands for payment using the full resources at its disposal as early as April 1984. However, the 1981 legislation required the RRS to take steps to prevent insolvency from acutally occurring. Pursuant to that law, benefits of RRS must be reduced in sufficient amounts beginning October 1, 1983, to avoid running out of money, unless Congress takes other steps before then.

Changes to taxes and benefits in 1974 and 1981 were intended to place the system in balance indefinitely. Yet, in every fiscal year since that time, benefits have exceeded income, thereby drawing down RRS trust fund reserves. The following table shows RRS financial operations since fiscal year 1974. The trust fund balance at that point was $4.3 billion.

Table 2.—TRUST FUND OPERATIONS, FISCAL YEAR 1975 THROUGH FISCAL YEAR 1982

[In millions of dollars]

Fiscal year	Income [1]	Outgo [2]	Trust fund balance [3]
1974			4,284
1975	2,781	3,117	3,950
1976	3,289	3,524	3,715
T.Q.[4]	481	1,038	3,157
1977	3,743	3,701	2,929
1978	3,934	4,116	2,773
1979	4,267	4,381	2,658
1980	4,481	4,887	2,252
1981	4,854	5,452	1,627
1982 (est.)	4,855	5,389	1,093
1983 (est.)	6,385	6,846	632
—1981 low point (April)			1,106
—1982 low point (April)			−20 to −25

[1] Taxes, interest on investments, appropriations for windfalls, net financial interchange.

[2] Benefits, net transfers for administration.

[3] Includes amounts owed to this account.

[4] Transitional quarter.

Source: Railroad Retirement Board.

Note that table 2 also lists an "April low point" for 1981 and 1982. Because of due dates for the payment of RRS taxes, the railroad retirement account receives very little taxes during the first month of a calendar quarter, about 2 months' collections during the second month, and 1 month of taxes in the third month. The FI payment occurs in June. The effect on cash flow of these two factors, is to make May 1 the date at which the balance of the account is at its minimum for the fiscal year.

During April 1981, reserves dropped to slightly more than $1.016 billion. In April 1982, the Board estimated an April 30 low point of −$20 to −$25 million. For the first time, the RRS trust fund reserve level was predicted to fall below zero. Under provisions of 1981 legislation, RRS borrowed money from the general treasury to meet benefit payments. The money borrowed was repaid during the same month because of a favorable revenue benefit relationship in May. This borrowing authority could be activated again as early as January 1983.

(1) THE MAGNITUDE OF THE IMMEDIATE FINANCIAL THREAT

To avoid an impending financial crisis, in 1981 RRS was given authority to borrow from the Treasury. The borrowing authority is restricted in any 1 year to the amount due the railroad retirement account from social security through the FI payment. Under the terms of the 1981 legislation, in any year that the Board determined that the estimated need to borrow would exceed 50 percent of the total payment due from social security, the Board is required to project the year in which borrowing authority would be exhausted, and to specify at what point and in what manner benefits will be reduced to prevent insolvency. The 1981 legislation required that any drain on the retirement account caused by permitting the railroad unemployment insurance trust fund to borrow form the main retirement account should be projected so that such borrowing authority could be suspended in an effort to keep the retirement account solvent.

On November 16, 1982, the RRB circulated a memorandum prepared by the chief actuary and the director of research of the Board, projecting that the year for which 50 percent of the borrowing authority would be needed is fiscal year 1983. Thus, under terms of the legislation, the additional required projections and announcements were made.

On January 27, 1983, the Board circulated a revised set of projections based upon the view of the actuary and the research director that conditions had worsened.

Table 3.—REVISED RAILROAD EMPLOYMENT PROJECTIONS, 1983–92

Calendar year	Employment assumptions (thousands)	
	A	B
1983	385	370
1984	370	350
1985	360	335
1986	355	325
1987	350	320

Table 3.—REVISED RAILROAD EMPLOYMENT PROJECTIONS, 1983-92—Continued

Calendar year	Employment assumptions (thousands)	
	A	B
1988	345	315
1989–92	340	310

Source: Railroad Retirement Board, Jan. 27, 1983.

The following table (table 4) derived from the January 27 memorandum, shows two projections of fund experience using two sets of employment assumptions. The employment assumptions are shown above.

According to both projections A and B, all borrowing authority will be exhausted in fiscal year 1984.

Table 4.—FINANCIAL DEFICIENCY OF THE RAILROAD RETIREMENT ACCOUNT UNDER TWO SETS OF EMPLOYMENT ASSUMPTIONS, FISCAL YEAR 1983 THROUGH FISCAL YEAR 1992

[In millions of dollars]

Fiscal year	Estimate A			Estimate B		
	Amount needed (a)	Available borrowing authority (b)	Excess (a−b)	Amount needed (c)	Available borrowing authority (d)	Excess (c−d)
1983	−1,177	1,867	–	−1,255	1,867	–
1984	−2,421	2,109	−312	−2,707	2,159	−548
1985	−3,627	2,254	−1,373	−4,128	2,336	−1,792
1986	−4,809	2,300	−2,509	−5,566	2,413	−3,153
1987	−6,082	2,355	−3,727	−7,096	2,503	−4,593
1988	−7,487	2,456	−5,031	−8,713	2,618	−6,095
1989	−8,992	2,560	−6,432	−10,428	2,730	−7,698
1990	−10,576	2,672	−7,904	−12,235	2,851	−9,384
1991	−12,112	2,650	−9,462	−14,022	2,848	−11,174
1992	−13,832	2,684	−11,148	−16,005	2,895	−13,110

NOTE.—These estimates assume that money will continue to be drawn from this account into the railroad unemployment insurance account.

Source: Railroad Retirement Board, Jan. 27, 1983.

Table 4 also shows that under these assumptions, fund outgo will generally exceed revenue to the account by over $1 billion annually for a cumulative deficit of between $11.1 billion and $13.1 billion by 1992.

(2) SENSITIVITY TO EMPLOYMENT ASSUMPTIONS

Table 5 illustrates the radical dependency such projections have upon the level of industry employment assumed. Assumptions about future employment have much more effect than those about demographic and economic conditions because the system is primarily financed by taxes tied to employee payroll.

Table 5 illustrates this phenomenon dramatically.

Table 5.—COMPARISON OF RAILROAD RETIREMENT ACCOUNT PROJECTIONS USING IDENTICAL ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS BUT DIFFERENT EMPLOYMENT ASSUMPTIONS

[Dollars in millions, employment in thousands]

Calendar year	Employment assumption "D"	Progress of the fund [1] "D"	Employment assumption "G"	Progress of the fund [1] "G"
1981	515	$1,197	505	[2] $1,086
1982	510	1,120	450	568
1983	505	1,122	430	133
1984	500	1,157	410	−370
1985	498	1,322	390	−928
1986	496	1,462	380	−1,574
1987	494	1,591	370	−2,361
1988	492	1,730	360	−3,267
1989	490	1,899	355	−4,236
1990	488	2,366	350	−5,115
1991	486	2,723	350	−6,148
1992	484	3,105	350	−7,268
1993	482	3,611	350	−8,413
1994	480	4,246	350	−9,587
1995	478	5,035	350	−10,781

[1] Fund balance at end of calendar year.

[2] Actual fund balance at the end of 1981 was used to start projection.

Source: Railroad Retirement Board, 15th Actuarial Valuation.

As can be seen from table 5, projection "D" shows a slight decline in the fund balance in 1982 and 1983, but a steady growth in reserves thereafter, while projection "G" shows a steady deterioration in fund performance over the same period. (These two projections are from the 15th Actuarial Valuation and were performed with all variables other than employment held constant. As table 4 demonstrates, circumstances have deteriorated markedly since the valuation was performed.)

The importance of this dependence cannot be overstated when the level of fund reserves is as low as in the railroad retirement account. In the first place, the absence of reserves precludes any value being assigned to interest accumulation, there being no investments upon which interest can be earned. In addition, because the fund level is now unquestionably rapidly approaching default, the degree of volatility normally inherent in economic assumptions has become relatively unimportant.

The burden for developing employment assumptions that is thereby placed upon the acutuary responsible is tremendous and extraordinary; the assumptions drive both the date at which benefits have to be cut to avoid insolvency, and the amounts of additional revenue and tax increase needed to avert benefit cuts. Given the precarious state of the fund, there can be no retreat to a margin of error. In a system in which taxes on each worker's salary amount supports three beneficiaries, the units of taxation cannot be reduced without serious short-term consequences.

Table 6 shows employment in the railroad industry over the last 10 years.

Table 6.—AVERAGE RAILROAD EMPLOYMENT 1973 TO 1982

[In thousands]

Calendar year	Average number of workers
1973	584
1974	592
1975	548
1976	540
1977	546
1978	542
1979	554
1980	532
1981	505
1982	440
Employment level January 1983	388

As can be seen by the table, employment has declined by 20 percent since the system was refinanced and revenues and benefits balanced in 1981.

(E) Duration of the Problems

There is no long-term financing problem in RRS; the beneficiary rolls have started to decline, the primary obligation for social insurance benefits (tier I) has been assumed by social security through the Financial Interchange, and the combined tier II tax rate would be adequate to support the accruing benefit rights of current workers. However, there are two intermediate problems: (1) taxes are inadequate to support scheduled benefits, and a serious short-term cash flow problem exists because of the rate and timing of revenues into the main RRS account.

Railroad retirement benefits are drawn primarily against the railroad retirement account. Railroad unemployment benefits are drawn against the RUIA, which is required by law to borrow from the railroad retirement account when its own funds are exhausted.

The combined deficit in the railroad retirement account and the RUIA exceeded $1 billion for calendar year 1982. At the end of the year, the railroad retirement account contained around $80 million in reserves. The RUIA was in arrears to the railroad retirement account by $360 million. In February 1983, the combined accounts will need an additional $370 million, and the railroad retirement account will begin to exercise its own emergency borrowing authority. Although the loan is to be repaid in June 1983, the Board's actuary estimates that borrowing will resume as early as October 1, 1983, and that the authority to borrow would be exhausted before payment of checks on May 1, 1984.

Because the number of beneficiaries is declining, if the decline in the work force bottoms out, or the financing source of RRS is otherwise stablized, the intake of revenue into the system would probably be sufficient to meet benefit demands within a generation. However, intermediate and short-term problems can neither be resolved nor can their significance be accurately determined without reliable employment projections. Because the contingency funds in the system have been virtually exhausted, there is no margin for error. Yet, a range of estimates cannot give the system's labor and management sponsors either a precise timetable for needed action or a clear sense of the scope of the measures needed.

SUMMARY

The precariousness of the system means that all shortrun refinancing actions must be directed toward objectives that can be stated only by using employment assumptions, with a range of uncertainty so broad that such objectives are impossible to state with enough precision to allow negotiators to reach agreement as to what actions to take. In the absence of recommendations from railroad industry representatives, Congress could be drawn to action on its own, because only congressional action can avert significant benefit cuts beginning on October 1, 1983.

SPECIFIC ISSUES IN RAILROAD RETIREMENT

The following three sections are intended to provide interested observers and participants of the railroad retirement refinancing dilemma with basic tools for discussion. These sections: (1) examine issues in the generosity and distribution of benefits, (2) treat issues arising from the source and timing of revenue into the system, and finally, (3) present options for managing the immediate crisis and intermediate problem.

(A) Benefits

(1) GENEROSITY

In discussing the generosity of RRS benefits, and their relationship to financing, three senses of generousness are explored. In the first sense, benefits are too generous if the revenue necessary to support those benefits cannot be raised, either through collective bargaining in the industry or through the political process. In the second sense, and as an outgrowth of indecision about the first, it might be argued that RRS benefits are too generous if their cost exceeds the cost of pensions in comparable employment outside the rail industry. In the third sense, particular benefits might be considered too generous if, compared to prevailing practice in other private pensions, these specific RRS benefits seem especially liberal.

(a) Generosity Relative to Available Revenue

The question of whether or not the total cost of RRS benefits is "too" high requires some presumption of what is a suitable cost level. In one sense then, the total cost of RRS benefits is too high if, and only if, (1) the revenue to sustain them cannot be produced in the industry in which they were earned and (2) supplements to the basic revenue raised by the industry cannot be successfully identified. Benefits are too generous if they cannot be paid for and thus have to be scaled back to a level consistent with revenue attainable.

Railroad labor and management have traditionally negotiated resolutions to RRS issues and it can be expected that every attempt will be made by both sides to reach an agreement to avert the impending crisis. It is unknown whether sufficient additional revenue is available within the rail sector to restore RRS to balance and avert any short-term cash flow crisis. It may be that the necessary revenues cannot be raised within the industry, given the short leadtime available before automatic provisions to prevent insolvency are activated. Congress will likely be called upon to provide assistance to RRS financing, at least for resolution to the immediate cash flow problem. In that event, the traditional hands-off approach taken by the industry to questions of benefit structure and generosity would presumably be set aside, as Congress considers what responsibility for RRS it is willing to acknowledge.

(b) Railroad Retirement System Costs Compared to Other Pension Plans

As a result of the 1974 act, RRS is generally comparable to private pension plans earned through other industrial employment. Because the 1974 act eliminated further opportunities to qualify for windfall benefits as a result of dual benefit entitlement under both social security and RRS, it is reasonable to identify the industry component of RRS separately from the social security benefit. Thus, RRS financing is primarily concerned with the cost of the industry earned benefit. The industry portion of the benefit consists of tier II benefits for retirees and spouses, plus any aspect of the tier I benefit that is not received on a basis identical to social security eligibility.

Given the complexity of RRS benefits, a direct comparison to the structure of other industrial pensions is difficult. However, it is possible to compare costs and overall generosity. One method is based on a comparison of "normal costs" derived by applying the same set of economic assumptions to different plans. Normal cost is defined as the present value of future benefits divided by the present value of future compensation, for a typical group of new entrants. In other words, normal cost is the percentage of every paycheck that should be contributed over the total career of each employee of a group of new entrants, to fully pay for all benefits to be received by that group. The RRS total normal cost, without social security, ranges from 5.37 percent to 6.29 percent, depending upon which of the five projections in the RRB's 15th actuarial valuation is used. As part of the Congressional Research Service (CRS) work-related entitlement study, a "typical" private pension plan was supposed, and that typical plan was then evaluated using the same set of assumptions as was applied to the other plans studied.[3] The normal cost of a typical private pension was approximately 15 percent higher than that of RRS.

(c) Railroad Retirement System Benefits Compared to Other Pensions

Another way to compare RRS with other private pensions is to examine average benefits paid. The Employee Benefit Research Institute (EBRI) has studied the generosity of private pensions. The institute estimates that in 1979, average private pension benefits were about $2,704 a year.[4] Information from the RRB indicates that the average award in 1979 of the railroad industry portion (tier II) of RRS benefits was about $2,784, annually.

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[3] The typical plan was based on a Hay Associates' survey of 805 firms. "Typical" is defined as 1.75 percent of average high 5 years of salary times years of service offset by 1.43 percent times unreduced social security benefit times years of service (capped at 50 percent offset) with 4 percent per year reduction for retirement under age 65.

[4] "Retirement Income Opportunities in an Aging America: Income Levels and Adequacy." Employee Benefit Research Institute. Washington, D.C., 1982.

Another comparison yardstick is replacement rates. Replacement rates are the percentages of pre-retirement earnings replaced by the pensions. For most employees, retirement means changes in consumption patterns, tax liabilities, and savings rates. Because of variations in tax treatment, and because retirement income is generally lower than pre-retirement salaries, net after-tax replacement rates are often better indicators of plan generosity than gross replacement rates.

In the following table, net and gross replacement rates of RRS and the typical private pension mentioned above are compared. The table shows replacement rates yielded under each plan for employees retiring at different salary levels and with careers of differing lengths.

Table 7.—A COMPARISON OF RRS AND A TYPICAL PRIVATE PENSION: REPLACEMENT OF FINAL YEAR PAY FOR EMPLOYEES RETIRING WITH VARIOUS CONFIGURATIONS OF AGE, SERVICE, AND MARITAL STATUS

[Percent replacement at retirement and at age 80—includes social security or tier I benefits]

	RRS		Private pension	
	Retirement	Age 80 [1]	Retirement	Age 80 [1]
Unmarried:				
65/40:				
Gross	42.9	34.1	70.6	51.2
(Net)	(66.7)	(53.0)	(94.6)	(72.2)
60/30:				
Gross	36.4	28.2	32.3	27.1
(Net)	(56.6)	(43.8)	(44.3)	(42.0)
65/20:				
Gross	27.7	23.3	41.6	31.9
(Net)	(43.0)	(36.2)	(59.6)	(47.5)
Married: [2]				
65/40:				
Gross	63.0	46.2	71.3	54.8
(Net)	(90.6)	(66.4)	(94.8)	(75.8)
60/30:				
Gross	53.6	41.7	27.5	29.5
(Net)	(77.2)	(59.9)	(36.5)	(44.4)
65/20:				
Gross	40.8	34.5	45.0	36.8
(Net)	(58.7)	(49.6)	(63.3)	(52.9)

[1] Cost-of-living adjustments (COLA's) assume: (a) 1982 social security trustees report intermediate II-B assumption; (b) full COLA for RRS tier I and for social security; (c) remaining RRS benefits adjusted at 30 percent of tier I adjustment (tier II at 32.5 percent plus supplemental at 0 percent equals 30 percent combined); and (d) private pension adjusted at 25 percent of social security COLA.

[2] Married worker examples are based on 0 dependents other than spouses.

NOTE.—Wage histories used for these calculations assume entering salary of $13,368 and final salary of $45,413, both in 1982 dollars.

Table 7 shows that employees retiring at age 65 after long careers in railroad service do not receive as much in retirement income as they would under this particular private pension. Note, however, that married retirees receive greater benefits relative to single workers under RRS than in the private pension. The RRS pays benefits to spouses in both the social security component (tier I) and the pension component (tier II). Private pensions rarely offer additional benefits to spouses.

Table 7 also shows that RRS retirees have a distinct advantage over private pension retirees in the age at which they receive unreduced benefits. The RRS permits retirement at age 60 with 30 years of service and pays unreduced tier I benefits at that age, whereas the private pension beneficiary receives no social security benefit at age 60, and a benefit at age 62 reduced by 20 percent of the benefit payable at age 65. The provision "deeming" RRS workers to be 65 at age 60 is thus an important feature encouraging employees to retire early, especially given that most employees retiring under 60/30 provisions actually have more than 30 years of service; the average for retirees in 1979 was 36 years of service. As will be seen by the table, railroad workers retiring at age 60 receive higher benefits than their private pension counterparts, especially if the railroad workers are also married.

Another point shown by table 7 is the importance of COLA's in maintaining the value of pension benefits. In this example, RRS industry (tier II) benefits are lower than the pension benefits provided by the typical pension plan. Because both tier I and social security are computed using the same formula, and in this case the same wage histories, the social security and tier I components for workers retiring at age 65 are identical. The tier I benefit thus comprises a greater share of RRS benefits than social security comprises of the private pension. Therefore, over 15 years, as demonstrated by this table, the total RRS benefit loses less original value than the private pension, because more of it is fully adjusted. The difference in adjustments to the remaining portions of the two benefits is insignificant. (RRS tier II adjustments increase approximately the same percentage as the typical private plan.) As will be noted, the advantages granted to RRS 60/30 retirees is even greater because the portion fully adjusted is larger.

The table show both gross and net replacement rates. Although most of the RRS benefit is exempt from Federal income taxes (all except a $43 monthly supplemental), while only the social security component of the private pension is not taxable as income, this difference in tax treatment is inconsequential for purposes of this table. If the pension portion (tier II) were taxable, the tax liability would be small. It should also be noted that although these salary examples are not unusually high, lower salaried workers would have higher replacement roles.

(2) SPECIFIC BENEFIT ISSUES

(a) Early Retirement

The RRS permits retirement at age 60 for workers with 30 years of rail service. Benefits for tier I are calculated using the social security formula and are based on railroad service plus any service under social security. In RRS, these benefits are not reduced for retirement under age 65, as they are in social security. Tier II benefits are computed on the same basis for all retirees.

It is not at all uncommon for pension plans to provide retirement benefits at ages earlier than the age of social security eligibility, nor is it unknown for pension plans to provide the amount of the anticipated social security benefit when retirement occurs. This supplement is then dropped when the social security benefit actually begins. (An example of this level-benefit approach is discussed in the chapter on the "Tennessee Valley Authority Pension" elsewhere in this volume.) Usually, however, early retirement is possible only with reduced benefits—and social security benefits are reduced by 20 percent for those retiring at age 62. Plans providing early retirement supplements equivalent to the expected age 62 social security benefit reduce the total benefit payable if the option is exercised. The effect of this "60/30" provision in RRS is to award the unreduced social security benefit that would be paid at age 65 to full career workers at age 60.

During negotiations between rail management and labor representatives, proposals to raise the age of retirement are certain to be examined, as are other proposals intended to alter the 60/30 provisions.

The 60/30 provisions are identified as one of the more costly benefits of RRS. Because social security under the FI reimburses RRS for only those benefits identical to social security, the entire tier I benefit until age 62, and 20 percent of the tier I benefit after age 62 are "unrecompensed" by social security. The effect of full benefits at age 60, then, encourages employees to retire at that age and thus drives up RRS costs.

Railroad labor representatives argue, however, that the 60/30 benefit is a feature their members are most adamant about protecting. The employee groups contend that the distribution of retirement dollars to employees in that category is a proper reward to full career rail employees and an acknowledgment that by age 60 most railroad workers are physically ready to retire. They further point out that the opportunity to retire early accomplishes a traditional RRS objective: creating job opportunities for younger workers who would otherwise be laid off.

(b) Cost-of-Living Adjustments (COLA)

Tier I benefits are adjusted fully and automatically to any COLA granted to social security benefits. Through COLA provisions, basic social insurance benefits are protected against inflation. However, because the COLA is applied to all tier I benefits, employees retiring under 60/30 provisions also receive full adjustments to their tier I benefits, even though the award criteria under those provisions differs from that of social security. This difference raises questions about the role full and automatic COLA plays in retirement benefits.

Full COLA accomplish the idea of a secure source of retirement income relatively unaffected by inflation. Inflation robs annuities of their value; full COLA restores that value. However, the cost of full COLA cannot be known with certainty in advance because the factor controlling those costs, namely, the rate of change in prices, is external to the program and uncertain.

In private pensions, ERISA funding requirements act to prevent full COLA, because plan sponsors are required to amortize all liabilities created by benefit increases. It is instead left to the social security program to provide the social insurance protection against inflation that full and automatic COLA is intended to assure. The financing of such a benefit mechanism depends not upon a legal requirement as with ERISA regulated private plans, but upon political agreement to support the adjustment through taxing authority.

In the industry pension portion of RRS (tier II), COLA provides for 32.5 percent of CPI changes, rather than the 100-percent adjustment to tier I, thereby reducing to less than one-third the impact on plan costs of inflation-driven COLA. It could, therefore, be argued that only benefits identical to social security should receive full COLA. By this reasoning, all other RRS benefits including the tier I 60/30 benefit, would receive the smaller tier II adjustment, except for those portions directly associated with the social security financing structure.

(c) Spouse Benefits

Generally, private plans do not provide spouses' benefits. That RRS does is largely an outgrowth of the period before 1974, when RRS served both the social insurance and pension aspects of income protection for railroad workers. The payment of spouses' benefits distributes plan dollars in the direction of families and away from single beneficiaries, a practice consistent with social insurance but generally thought inappropriate for staff pension plan benefits based upon salary and service. The existence of spouses' benefits costs the average single RRS retiree about $100 per month. Nevertheless, rail labor maintains a strong position with respect to continuing spouses' benefits; about two-thirds of RRS retirees are married at the time of retirement.

(d) Service of Less Than 10 Years

Employees with less than 10 years rail service at the time of retirement will not receive any value for the 2-percent tier II tax on employee wages in effect since October 1, 1981. This raises equity questions because, in effect, money collected from employees who leave the industry helps pay for benefits of those who remain, a practice not permitted under ERISA. Under ERISA, employees always retain the rights to their own contributions.

(3) TAXATION OF BENEFITS

Tier I, tier II, and windfall benefits are not subject to taxation. The supplemental annuity (a special annuity being phased out and is financed separately from the other RRS benefits, and it is not affected by the RRS financing crisis, is not generally discussed in this paper) is the only RRS benefit subject to Federal income taxes. Because social security benefits are also not taxable it can easily be argued that tier I benefits should also not be taxed. However, given that all private pensions are taxable, a case could be made that tier II benefits should be taxable after the value of any taxes already paid as contributions have been received by annuitants in the form of benefit payments. It is doubtful that the taxation of tier II benefits would have much effect upon RRS beneficiaries or the Federal Treasury. The income received through tier II is not sufficient to acquire much tax liability, especially for beneficiaries over the age of 65 and thereby eligible for the double personal exemption. Nevertheless, making tier II subject to income taxes would be consistent with the treatment of tier II as a private pension and would yield some additional Federal revenues, and if the proceeds were converted to the RRS fund, it could help reduce the size of the fund deficit. However, because tier I is essentially a social security benefit, as has been proposed, one-half of social security benefits become taxable, tax liabilities for RRS benefits (one-half of tier I, plus tier II) would be higher than if tier II were the only RRS benefit to be taxed.

(4) REVENUES

All tier I and tier II benefits are paid from the main railroad retirement account. The RUIA is also mandated by law to borrow from the railroad retirement account whenever the RUIA is exhausted. The account has three main sources of income: taxes on industry payroll, interest on investments, and the interchange payments from social security. Because of the level of reserves is currently so low, interest on investments is not a significant part of revenue. If the railroad retirement account balance increases, interest will again play an important part in RRS financing.

(a) Tier I Payroll Tax

Employees and employers pay taxes equal to the rate payable under social security but on a monthly wage base instead of a yearly wage base. The monthly wage base is equal to one-twelfth of the actual social security wage base. The effect of applying the wage limit monthly, instead of yearly, is to moderate the influence of seasonal fluctuation in salaries on retirement credits earned annually. Thus, under railroad retirement, an employee may actually earn more than the annual social security maximum tax base during the year but be credited and taxed for wages at less than the maximum, if seasonal fluctuation includes months of earnings less than the maximum monthly amount. For 1983, the tax rate is scheduled to be 6.7 percent on a monthly maximum wage base of $2,975. All tier I taxes collected are credited to social security in the FI calculation.

(b) Tier II Payroll Tax

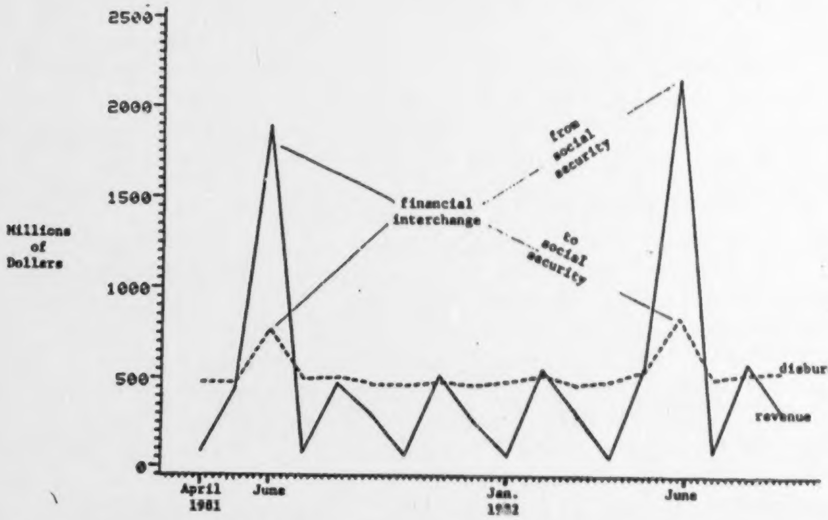
Employees pay 2 percent and employers pay 11.75 percent on wages up to one-twelfth of a wage base adjusted annually on the same basis as the social security wage base. However, the tier II wage base is one-twelfth of what the social security wage base would have been if certain specific changes to the social security wage base had not been enacted in 1977. The tier II tax is the fundamental revenue source for the industry portion of RRS benefits.

(c) Financial Interchange (FI)

The FI with social security affects shared benefits and tax experience of the two programs. Under the FI, RRS tranfers to social security taxes that program would have collected, and social security transfers to RRS the value of benefits it would have paid to RRS participants were RRS not to exist. The transfer occurs in June of each year and is based upon the previous fiscal year's experience. Thus, RRS receives the transferred amount nine months after the date for which the balance is presumed. In a sense, then, social security owes RRS between 9 and 20 months' money at any particular time. Although interest is also credited for this lag between the time benefits are paid out by RRS and the time RRS is repaid by social security, the effect on RRS of this payment schedule is a dramatic fluctuation is cash flow.

The following graph displays the fluctuations in railroad retirement account revenues in the 18-month period from April 1981 to October 1982.

Table 8.—OPERATIONS OF THE RAILROAD RETIREMENT ACCOUNT, APRIL 1981–OCTOBER 1982



Note that the disbursement line remains fairly constant except for each June when the RRS account is charged for its side in the FI transaction. The revenue line, however, shows an even rhythm of quarterly fluctuation broken each June by a dramatic increase in revenue resulting from receipt of the RRS side in the FI from social security.

(d) Railroad Unemployment Insurance Account (RUIA)

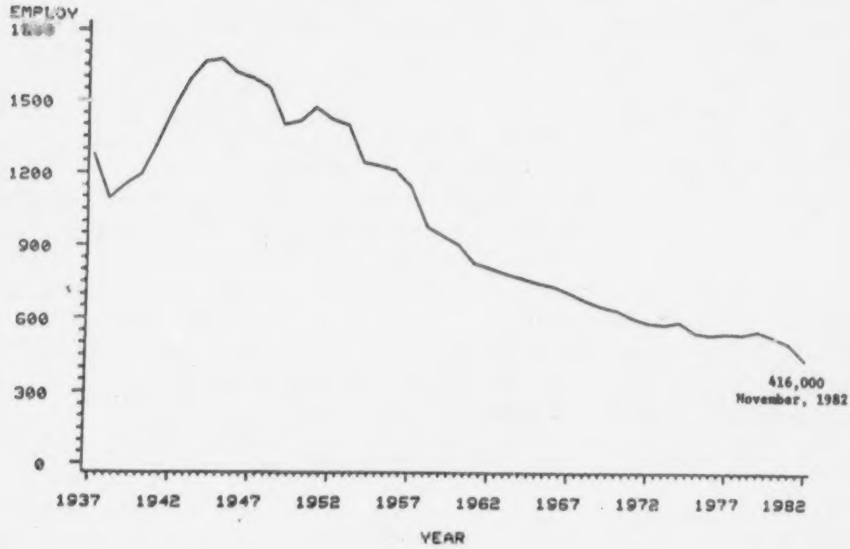
The RUIA is required to borrow from the railroad retirement account when RUIA funds are depleted. The RUIA is financed by a tax on employers normally sufficient to either pay all benefits as they come due or to repay the railroad retirement account in a relatively short period for any loans from that account. The railroad retirement account carries outstanding RUIA loans as an asset, although the practical effect is to make the amount of the loan unavailable for payment. As of December 1982, the RUIA owes $360 million to the railroad retirement account. Furthermore, because of the length of the current recession, it is unlikely that the RUIA will be able to pay to the railroad retirement account any outstanding amounts for several years unless additional taxes for railroad unemployment are levied upon railroads beyond those scheduled. Thus, the effect of RUIA borrowing authority from the main RRS account is that the RRS financing crisis threatens unemployment as well as retirement benefits.

(5) OUTLOOK FOR THE FUTURE

The RRS has four major financing problems: (1) because the major source of revenue is a payroll tax, financing is extremely vulnerable to employment levels; (2) because the relationship with social security is on a "lagged" basis, the resulting cash flow fluctuation is a serious problem when the system lacks reserves; (3) because the RUIA can borrow from the main account and is unable to repay, a needed source of funds is unavailable; and (4) because the system lacks reserves, interest earnings are no longer a source of revenue.

Even with a solution to the cash-flow problems, under the current financing structure, RRS will return to health only if railroad employment again climbs to pre-1981 levels. The long-term employment trend would seem to make that prospect unlikely, even assuming a fairly robust economic recovery. The following graph shows that the long-term trend in railroad employment is steadily downward with accelerated decline during recessionary periods. This decline can be blamed on gradual shrinking of the miles of operating track; an increase in the number of jobs contracted out; a rise in the applications of technological advance. There can be no denying that the employment outlook in the rail industry has been getting dimmer. Whether it has bottomed out at some irreducible minimum, or whether new growth potential exists is speculative at best.

Table 9.—RAILROAD EMPLOYEES, 1937–82



OPTIONS FOR CORRECTING THE FINANCING PROBLEM

(A) Dismantling Railroad Retirement

It could be argued that RRS financing problems cannot be resolved within the traditional framework of industry negotiated agreements, and that the insolvency of RRS is thereby inevitable. Therefore, the argument goes, in order to protect the Federal Treasury from assuming any of the burden for railroad pension benefits, RRS should be dismantled so that the rail industry will be responsible for reducing or sustaining the industry's pension benefits, and the Federal Government will be responsible only for those benefits received by all other social security recipients. This proposal has surfaced periodically over the history of RRS, and is based upon the distinction between the responsibility for social insurance, which rests upon public agreement, and the responsibility for pensions, which rests upon agreements between employers and employees. The most recent version of this proposal met with little enthusiasm when it was offered as part of the administration's fiscal year 1983 budget.

While a proposal to dismantle RRS has considerable theoretical appeal, during a financing crisis there is a significant and fundamentally irresolvable flaw to the approach. There is no way to provide any security to those benefits which would become the responsibility of the railroad industry. While it might be easy to assert that the sole responsiblility *should* reside with the rail industry, a review of history suggest that the Federal Government has assumed a role in the protection of employee pension benefit rights and guarantees, and that there is a moral obligation to continue to provide some measure of benefit security.

Railroad retirement is often referred to as unique, as impossibly complex, as an anomaly in the category of Federal work-related entitlements. But it is plainly incorrect to describe the RRS as an accident of history. The evolution of pension benefit financing in general, and because they were the first, railroad pension benefit financing in particular, has been one of establishing practices and ultimately laws to make those benefits secure. The essential vulnerability of plans which were dependent upon either the prosperity and disposition of employers, or the number and generosity of employees, was that during good times, all participants—both sponsors and recipients—saw advantages to financing only current expenses. However, during hard times, the sponsors had both a compelling financing need, and an unmistakable self interest in reducing retirement benefits. It was the need to provide old-age income security that led to social security, with its risks pooled over most of the labor force, and its benefits secured by that support. It was also that need that led to the passage of ERISA. Social security is a pay-as-you-go system that provides security through public agreement and taxation while ERISA provides private pensions the security of full funding through legal requirements. Private pension benefits are specific to the employment in which they were earned, but social security benefits are earned in nearly all employment.

Thus, the principle of benefit security is treated differently under private pensions and social security. Private pension benefit security is based on the legal requirement that the level agreed upon will be delivered, while social security assumes that the deliverable level will always be subject to agreement. The difference is between an entitlement and a legal right.

Before the 1937 act, railroad retirement benefits were tenuous because the necessary revenue required adequate amounts voluntarily contributed—a relationship between revenue and benefits necessarily insecure during hard times of declining profits and employment. The 1937 act made the revenue and benefit relationship subject to agreement supported by legislative authority, but did not make the benefits secure in the way in which ERISA was to make private pensions secure, but rather in the manner of social insurance, through political agreements that were by their very nature subject to change.

Amendments after 1937 continuously and inseparably elevated both the social insurance and the pension aspects of the benefits but never differentiated the two for purposes of financing those benefits. The benefits continued to be financed on a social insurance basis. The 1974 act was an attempt to separate the social insurance and private pension aspects of both benefits and financing: (1) the social insurance benefits became socially financed and secured for all practical purposes; and (2) the financing of the remaining private, collectively bargained, industry specific, pension benefits and financing became exposed to analysis and review.

To dismantle RRS now would perhaps streamline certain aspects of Federal entitlement resonsibility, but it would not significantly alter the relationship between railroad employees and retirees and social security. In the absence of a fund, however, it would make the industry pension benefits insecure, in much the way many private plans were before ERISA, and in much the same way railroad retirement benefits were prior to 1937. Benefits would be vulnerable to the disposition and prosperity of employers, and to the number and generosity of current workers. Beneficiaries would have neither the legal claim to a fund, nor the political claim to an entitlement.

(B) Restoring the Benefits and Financing to Balance

As previously discussed, the actual financial needs of the system cannot be ascertained without employment assumptions, and thus the determination as to what change will restore balance in the relationship between benefits and revenues is an exercise in speculation. Nevertheless, it is possible to identify potential changes which more sharply separate private pension structure from Federal entitlements. The following options are offered for consideration, with the recognition that the affected parties are certain to offer alternatives.

(1) BENEFITS

The spouses' benefit structure could be altered or eliminated altogether. One possible change would be to link the spouse benefit formula to the primary earner's years of service instead of directly to the primary earner's benefit. This would distribute more money to long-service workers, a distribution consistent with private pension structure.

The retirement age could be raised. The current tier I benefit for employees retiring at age 60 with 30 years of service is computed using the social security formula and any social security earnings credits the employee may have acquired. The computation also treats the employee as if he were 65 and thus eligible for unreduced social security benefits. Social security reimburses RRS only for benefits that it would have paid had the employer been covered by social security and his railroad wages included as part of the computation. Social security pays full benefits at age 65 and reduced (by 20 percent) benefits at age 62. Thus, as noted before, the entire tier I benefit from age 60 to 62, and 20 percent of the tier I benefit after age 62, are the responsibility of the industry, that is, unrecompensed by social security through the FI.

According to RRB, a rough estimate of the total amount of tier I benefits not reimbursable under the FI was about $400 million for 1981. About 44 percent of this was for 60/30 retirees, and about 18 percent for spouses of employees with 30 years of service. The remainder was primarily for occupational disability benefits payable under RRS but not payable under social security.

Another way to save money in the unrecompensed tier I for 60/30 employees is to provide a reduced benefit which would be paid by social security at age 62. Thus, this benefit would remain "flat" from age 60 to 62 and then would be whatever the social security became from age 62 onward. Corresponding changes could be made for spouses. The actual flat amount would be indexed to the rate of increase in the wage base. For 1981, the average flat monthly amount would have been $540.

A different approach to the RRS-funded tier I 60/30 benefit would be to alter the method by which such benefits are adjusted for inflation. Because of the difference between ERISA funding and entitlement financing, it can be argued that full and automatic indexing of benefits to inflation as measured by CPI is a feature appropriate to social insurance but not to pensions. It would follow that unrecompensed benefits should be adjusted by the tier II COLA (32.5 percent of CPI changes) rather than to the 100-percent social security COLA. Such a change would retain full inflation protection for the social insurance provisions received on the same basis as all other social security recipients. If the change were applied to beneficiaries already on the rolls, Hay Associates, the actuarial consultant retained by CRS estimates that the proposal would save $1 billion by 1990.

The following table displays savings possible if these proposals had been made effective for new awards as of January 1, 1981.

Table 10.—ESTIMATE OF SAVING UNDER TWO PROPOSALS UNDER THE ASSUMPTIONS OF VALUATION F OF THE 15TH VALUATION PROPOSALS ASSUMED EFFECTIVE JANUARY 1, 1981

[In millions of dollars]

Year	Flat benefits	Change to tier II COLA
1981	6	
1982	22	3
1983	45	11
1984	74	22
1985	104	34
1986	136	46
1987	168	58
1988	202	70
1989	237	82
1990	272	96
1991	306	109
1992	339	121
1993	372	134
1994	404	149
1995	434	163
Savings as a percentage of payroll, 1981-85 (percent)	1.10	.38

Source: Railroad Retirement Board.

Table 11 shows the impact on beneficiaries of limiting the unrecompensed tier I 60/30 benefit to the tier II COLA. The table used 1982 social security trustees report II-B assumptions, and assumes that at age 62, beneficiaries would begin to receive full COLA on 80 percent of their tier I benefit. For ease in performing this computation, all retirees were assumed to retire on January 1, 1983, to have worked 30 years, and to have earned at the maximum creditable wage base during their entire careers. Actual dollar amounts would be lower for employees not working at the maximum for all years.

Table 11.—COMPARISON OF BENEFITS RECEIVED AT RETIREMENT AND AFTER 5 YEARS UNDER CURRENT LAW AND UNDER PROPOSAL B FOR EMPLOYEES RETIRING ON JANUARY 1, 1983

[1982 II-B assumptions; monthly amounts in dollars]

Age at retirement	Benefit at retirement	Benefit as of June 1988 current law	Change unrecompensed to tier II COLA
60	664	964	845
61	664	964	872
62	664	964	902
63	651	944	904
64	669	971	950
65	709	1,029	1,029

NOTE.—Apparent disadvantages for age 63 retiree results from the differences between the RRS provisions for "deeming" certain employees to be age 65, and social security provisions for selecting computational years.

The table shows that this change falls more heavily upon workers retiring at age 60 than at later ages. After the first five adjustments, the age 60 retiree would be receiving $119 less each month, while the age 64 retirees would receive $21 less. There would be no impact on employees not retiring until age 65.

(2) REVENUES

Estimates of actual dollar amounts needed to pay benefits are, for the most part, dependent upon assumptions about future wage growth, inflation, and the number, age, and years of service of beneficiaries. In the long run, these variables can have a significant effect upon benefit costs; in the short-run total benefit costs are fairly well established. Of course, the actual dollar amounts needed to pay benefits would decline if any cuts in benefits are made.

The financing problems of RRS are not generally the result of benefit growth, but rather the decline in employment. Because the units of taxation are diminishing, the total intake of the system is down. Correcting the deficiency means raising additional taxation or finding another source of revenue. Establishing how much additional taxes should be or what amount of alternative revenue is needed is dependent upon assumptions of revenue amounts provided by the current payroll tax rate. Those assumptions are dependent upon expections of future employment levels. Thus, the major obstacle to restoring revenues and benefits to balance is the uncertainty over future employment.

(a) Alternative Revenue Sources

From time to time it has been suggested that the financing of RRS should be placed upon some base other than payroll. Faced with a similar problem, the major pension covering employees in the coal industry was changed from a payroll tax to a production tax, based upon the tonnage output of coal companies.

Similar production taxes have been suggested for changing the financing base for RRS. Alternative tax methods received some consideration during the study leading to the 1974 act. Examples mentioned in the past include taxes on ton miles of rail traffic, on car miles, on fuel consumed, or on total employer receipts.

These are four major drawbacks to alternatives to the payroll tax:

(1) Some industry employment does not involve the movement of trains and cannot easily be taxed through a device linked to train movement;

(2) production taxes of all kinds are subject to the same economic difficulties that drive down employment;

(3) the payroll tax is an obvious and rational link between salary and subsequent benefit liabilities contingent upon those salaries. Other tax sources do not have obvious links between the liability for taxes and the liability for benefits; and

(4) moving from the payroll tax to a new tax would cause railroads to reevaluate any potential gains and losses resulting from that change, causing confusion in the interests of individual railroads relative to each other.

The fragile relationship that exists between the various railroads in their relations with rail labor compensation issues, including retirement, requires for its success a willingness of individual railroads to ignore certain differences in the extent to which each railroad is responsible for liabilities and support. In a sense, this relationship was a major accomplishment of the 1937 legislation. As a result of the 1937 act, for retirement purposes employees ceased to be employees of a particular railroad or in a particular craft, but instead became employees of the railroad industry as a whole. Thus, responsibility for their retirement benefits was assumed by the industry as a whole.

(b) Increasing the Payroll Tax

The current tier II tax rate is 13.75 percent of taxable payroll—11.75 percent on employers and 2 percent on employees. Any change in tax liability, either by raising the taxable wage base or by increasing the tax rate cannot be assumed to permanently solve RRS financing problems given the uncertainty about future employment levels.

Increasing the tier II taxable wage base to equal the tier I taxable wage base would have brought $200 million in calendar year 1982. It should also be noted that such a change would result in increased benefits because the creditable wage base and taxable wage base are one and the same. Because of a formula change in 1981 granting retirees benefits based upon the average of 5 highest years of compensation, the effect upon benefit costs from raising the wage base would be rapid and significant. Resistance to both wage base increases and rate hikes can be substantial.

Yet, because of the immediate crisis, an increase in the tax rate is surely required if the industry is to continue to meet its responsibility to retired railroad workers. How much of a tax increase is needed to avoid exhausting all borrowing authority provided by the 1981 legislation varies with employment levels assumed for the time period projected. In addition, the tax rate increase required to avoid insolvency changes if it is assumed that Congress will repeal current provisions permitting the unemployment and sickness account (RUIA) to borrow from the main account are withdrawn. As part of the 1981 legislation, the Board is required to recommend a date at which the RUIA borrowing authority would be suspended. Eliminating RUIA borrowing authority reduces the tax rate increase required to avoid insolvency.

On Novermber 16, 1982, the chief actuary and the Director of Research at RRB, submitted to the Board members a draft of the report required by the 1981 legislation whenever it is projected by the Board that RRS will exhaust 50 percent of its authority to borrow from the general treasury. As part of that report, the Board is required to estimate the tax rate increase necessary to avoid insolvency. The following table, developed from information contained in that draft report, shows potential tax rate increases required in order to avoid insolvency. A revised draft dated January 27, 1983, indicates that the assumptions used in the November 16, 1982, memo may be too optimistic as employment has continued to fall. The table shows taxes projected on both the November 16 and updated employment assumptions.

Table 12 shows the employment assumptions for each estimate together with tax rate increases necessary to extend solvency to subsequent years, both with and without RUIA borrowing authority suspended. Under the projections, the tax increase must occur by October 1, 1983.

Table 12.—TAX RATE INCREASES REQUIRED TO AVOID INSOLVENCY UNDER FOUR SETS OF EMPLOYMENT ASSUMPTIONS

[Percentage increases beginning October 1, 1983]

Fiscal year	Estimate A			Estimate B		
	Employment assumptions (thousands)	RUIA borrowing continued	RUIA borrowing discontinued	Employment assumptions (thousands)	RUIA borrowing continued	RUIA borrowing discontinued
	November 16, 1982 Assumptions					
1983	420			400		
1984	410			380		
1985	400	3.0	2.5	365	5.5	4.6
1986	395	4.2	3.8	355	6.6	5.9

Table 12.—TAX RATE INCREASES REQUIRED TO AVOID INSOLVENCY UNDER FOUR SETS OF EMPLOYMENT ASSUMPTIONS—Continued

[Percentage increases beginning October 1, 1983]

Fiscal year	Estimate A			Estimate B		
	Employment assumptions (thousands)	RUIA borrowing continued	RUIA borrowing discontinued	Employment assumptions (thousands)	RUIA borrowing continued	RUIA borrowing discontinued
1987	390	4.7	4.5	350	7.1	6.6
1988	390	5.0	4.8	345	7.4	7.0
1989	390	5.1	5.0	340	7.6	7.3
1990	390	5.1	5.0	340	7.7	7.4
1991	390	5.1	5.0	340	7.7	7.4
1992	390	5.1	5.0	340	7.7	7.4
January 27, 1983 Assumptions						
1983	385			370		
1984	370	6.3	3.5	350	11.6	7.8
1985	360	8.8	6.5	335	12.2	9.0
1986	355	9.3	7.4	325	12.4	9.6
1987	350	9.4	7.8	320	12.4	10.0
1988	345	9.4	8.1	315	12.4	10.2
1989	340	9.4	8.2	310	12.4	10.4
1990	340	9.4	8.3	310	12.4	10.4
1991	340	9.4	8.3	310	12.4	10.4
1992	340	9.4	8.3	310	12.4	10.4

(c) The Need for Stable Revenues

In 1981, rail labor and management negotiators agreed on certain benefit cuts in addition to tax rate increases, and it can be supposed that further cuts may be agreed to when negotiators once again seek to resolve the current RRS financing crisis. The tax rate increases necessary depend somewhat on any agreed cuts, and it can be assumed that management representatives will place great emphasis on the impact any benefit cuts would have upon railroads' ability and willingness to produce the remainder of needed revenues to restore the system to balance. Although the industry has, so far, paid all benefits earned in rail employment (the windfall was earned through employment outside the rail industry), continuing to fully finance the present level of benefits through the current payroll tax method can be questioned, given the diminishing number of employees. In order to maintain the current structure in the face of continued shrinkage of rail employment, negotiators would have to seek further tax increases and/or further benefit reductions. Each subsequent round of negotiations would become more difficult as the declining units of taxation would force a more significant increase in RRS revenue required of each worker. Retirement benefits would be increasingly insecure because of the ongoing need for tax rate increases and further benefit cuts.

The following discussion is based upon the notion that unless revenue to RRS is stabilized at least to some extent, RRS will be unable to avoid serious financing difficulties for the foreseeable future, and railroad retirement benefits will be insecure, especially for workers not yet retired.

It is trivial to argue that the financing of RRS benefits depends entirely upon employment levels when the tax to support benefits is a payroll tax. However, it is simply incorrect to draw the conclusion that the capacity of the industry to support any particular benefit level depends strictly on the number of active employees. For instance, if each employment reduction is met by a corresponding increase in the productivity of remaining workers, then the amount of money for retirement benefits need not be directly affected by declining employment.

Yet employment decline is partly a response of rail employers to the increase in worker productivity resulting from technological advances, and partly a response to diminished revenues resulting from economic trends affecting industry revenues.

A recent Merrill Lynch railroad industry quarterly update points out the difficulty of separating loss of employment from technological advance from that resulting from economic downturns:

> Although the cost of labor as a percentage of the industry's revenue dollar remains high, it has declined in recent years from 53.8 percent in 1978 to 51.7 percent in 1979, to 48.5 percent in 1980, and to 47.4 percent in 1981. In 1980, the average monthly size of the labor force declined by 4.8 percent, and industry revenue ton-mile figures for 1980 actually increased by 0.5 percent. In 1981, the average monthly size of the labor force declined by 5.1 percent compared with an 0.7-percent drop in revenue ton-miles for the year. During the first quarter of 1982, the average labor force was 10.8 percent below year-earlier levels, while revenue ton-miles for the period declined by 12.3 percent. Preliminary figures for the second quarter indicate a year-to-year decline in the average labor force of 11.3 percent and in revenue ton-miles of 5.8 percent.[5]

The following graph shows the trends in revenue ton-miles and employment levels in major railroads over a longer period.

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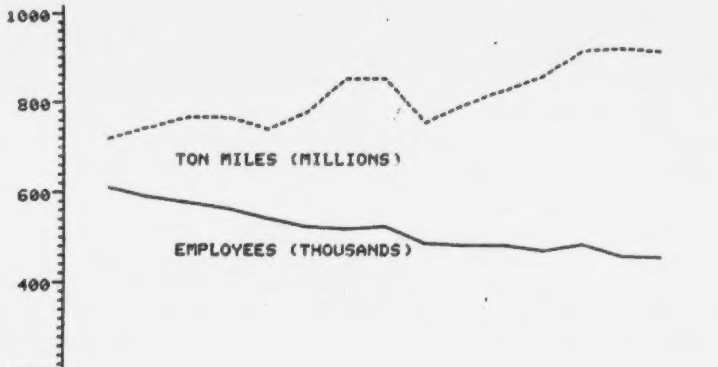
[5] Railroad Industry: Quarterly Update. Merrill Lynch, August 1982.

Table 13.—REVENUE TON MILES AND CLASS 1 CARRIER EMPLOYEES



The graph shows that both industry revenue and employment levels are affected by economic conditions, with revenue showing more dramatic downturns during recessions. However, as the graph indicates the long-term trends of each are increasingly divergent. Long-term revenue trends are upward while employment is steadily declining.

It would appear that stability in RRS financing will have to continue to be linked in some manner to a tax on payroll, but some changes in the method by which the tax is assessed are worth considering. It should be remembered that the payroll tax financing mechanism is primarily a method for distributing the costs of RRS throughout the industry. Because over 85 percent of the tax is borne by industry employers and not employees, the RRS payroll tax is primarily an operating expense—a cost of doing business for rail industry employers. Thus, there is some rationale for arguing that primary responsibility for any increased RRS revenue needs might be met by the employer. In fact, most private pensions are financed entirely by employers. However, it is not altogether clear that an agreement between labor and management needs to continue this ratio of employee/employer taxes, given the general presumption that agreements about RRS tax and benefit changes find their way back into other compensation agreements—total compensation is the actual labor cost to employers and the tradeoffs between the components of compensation is a tension resolved according to factors and motives specific to opposing strategies, and is thus hidden from direct outside analysis.

It is worth noting, however, that the higher the responsibility for subsequent tax increases is placed upon labor, the more the structure of RRS financing changes. At present, the primary source of tax revenue rests with employers whose ability to pay is dependent upon margins of profit directly affected by cost factors, one of which is labor compensation. Therefore, ability to pay increased taxes is arguably improved by increased productivity, either by increased revenues and constant employment levels or constant revenue and reduced employment. If more of the responsibility for dollars generated by payroll taxes rests with employees, then the immediate capacity to generate these dollars is directly tied to employment levels and not to productivity. In fact, if increased productivity results in fewer employees, then remaining employees could be asked to pay higher taxes, a somewhat perverse reward for higher output per worker.

If the ratio of total tax dollars produced from employer operating expenses to dollars acquired from employee payroll decreases, that is a change away from financing the system from industry productivity, and toward financing the system by an integenerational transfer—a transfer of income from workers to retirees. The snowballing effect on employees of producing the same number of dollars from a declining number of employees increases the precariousness of RRS financing, and that instability contributes to benefit insecurity. As employees contribute at even higher rates, pressure mounts to reduce benefits to control the rate at which the tax increases. Employees begin to pay more for less in future benefits. As employment drops and jobs become less secure, employees pay more for benefits they are less certain to collect.

(d) Options To Stabilize Revenue

There are numerous ways in which revenue might be stabilized, and all of them can be criticized as dependent upon the existence of money in the rail industry that may not be available and might not be available in the foreseeable future. Congress will be, therefore, faced with the unpleasant problem of determining to what extent, if any, the general public bears any responsibility toward RRS participants. If, however, rail industry economic conditions stabilize because of overall improvement in the national economy, then these options might be workable methods for improving RRS financing stability.

If the economy continues to perform badly, Congress could be faced with problems created by the collapse of other multiemployer pension plans in the private sector. If enough pensions require the financial assistance of the Pension Benefit Guarantee Corporation (PBGC) it could exhaust its capacity to assure payments through existing revenue sources. Congress would then be asked to consider public responsibility for the guarantee of retirement benefits earned through private industry employment.

Three options for stabilizing RRS revenues are:

(1) Establish a variable tax rate based upon annual projections of revenues needed over a set (say, 5) number of years. Each year the rate would be adjusted to reflect changing conditions.

The attractiveness of this approach is that it can assure revenues as needed during critical periods without committing plan sponsors to permanent increases. The technique resembles ERISA provisions that require private pension sponsors to increase their contributions to fund additional liabilities. The problem with variable tax rates is that plan sponsors face unknowable and potentially devastating tax increases, and the increases depend upon projections and not matters of fact.

> (2) Freeze employment assumptions used to establish a revenue and benefit balance, and require plan sponsors to fund revenue losses resulting from actual events.

A method for computing this tax could be based upon an actual employment level for a particular quarter. The tax rate necessary for a reserve/payment balance would then be ascertained and written into law. The dollar amount yielded by that rate at that employment level would be computed. That dollar amount would become a minimum tax and would be indexed by the annual increase in the maximum tier II earnings base. Each employer would become responsible for the compensation base appropriate to that employer for the quarter for which the calculation was made. To prevent any artificial alteration of this liability the computation should be based upon a time passed, say the third quarter of 1981, the date of which the tax and payments were last balanced. The minimum tax which an employer would be required to pay for a particular calendar quarter would be equal to the indexed compensation computed for that employer, multiplied by the tax rate (in the example, the current tax rate would be applied). Mergers and acquisitions would transfer liabilities.

> (3) Assign specific tax rates at specific employment levels and structure the rates to maintain constant revenues.

The advantage of this approach is that it avoids some of the criticisms of variable tax rates, while increasing the stability of revenues. The problem with this approach is that it is imprecise in its application and may be too slow in its reponse to sudden drops in employment. A reasonable margin of error can, however, be designed into the schedule of employment levels and rates.

(3) THE CASH-FLOW PROBLEM

A large part of the short-term problems of railroad retirement is a result of cash-flow difficulties created by its relationship to social security and to the rail industry's own UI trust fund. Changes in these relationships could extend solvency from a few months to several years. Congress might also consider the impact on RRS financing of the difference between windfall payments and reimbursements from 1975 through 1981 and judge the merits of crediting the RRS account with outstanding amounts.

(a) Railroad Unemployment Insurance Borrowing Authority

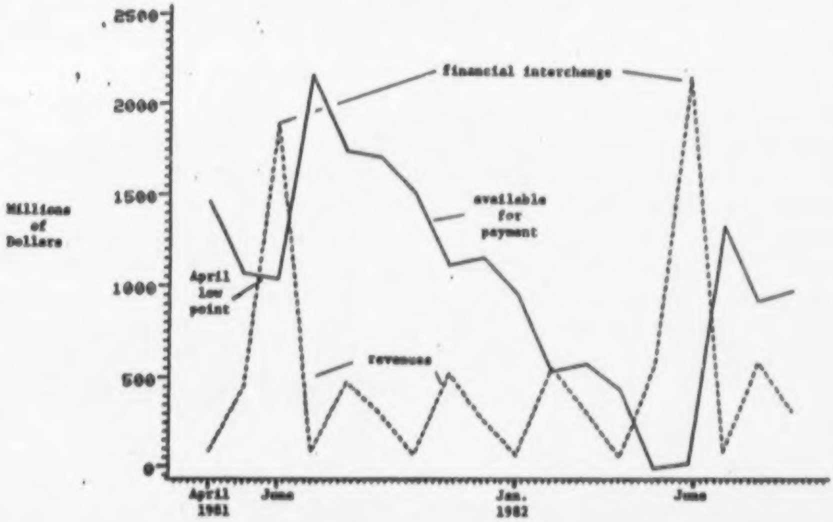
As of December 1982, the RUIA is in arrears to the main RRS account by $360 million, with no prospect of timely repayment. As a separate matter, the need to alter the industry tax support of RUIA is a subject demanding attention. The issue for RRS, however, is that the money owed to it by the RUIA constitutes a needed asset that is unavailable. One alternative is to transfer the RUIA borrowing authority to the general fund. This would free the asset for use by RRS to pay retirement benefits. The RUIA would be placed in a similar relationship to the Federal Treasury as State unemployment funds that have exhausted their direct Federal UI account funds.

(b) Relationship With Social Security

As has been discussed earlier in this paper, a major source of RRS cash flow difficulties rests with its relationship to social security. The financial interchange payment reflects experience in an accounting period ended 9 months earlier—the outstanding amount reflects experience of from 9 to 20 months duration. The 1981 borrowing authority was intended to alleviate this problem during emergencies; RRS can borrow against due payments, i.e., up to 12 of the potential 20 months in outstanding amounts. A change in this authority to permit RRS to draw the entire amount on a current basis, that is in the month following the month in which the experience occurs, would extend solvency considerably.

The following tables help explain these two cash flow changes. These accounts are all accounts within the Federal Treasury, and thus these changes would have no direct impact on the unified Federal budget. The first graph (table 13) shows revenue to the fund and reserve balances over an 18-month period. It may be helpful to return to the graph (table 8) on page 416, which shows revenues and disbursements over the same period.

Table 14.—OPERATIONS OF RAILROAD RETIREMENT ACCOUNT (APRIL 1981–OCTOBER 1982)



Note that revenues follow a fairly even pattern of quarterly rhythms from the timing of tax receipts, and dramatic yearly increases from FI payments, while reserves demonstrate a pattern of high points and low points within an overall downward trend.

Table 15 shows the cause of the overall downward trend in reserve levels. As can be seen by the graph in table 15, average disbursements exceeded average revenues by about $50 million monthly, thereby reducing reserve balances.

Table 15.—OPERATIONS OF RAILROAD RETIREMENT ACCOUNT (APRIL 1981–OCTOBER 1982)

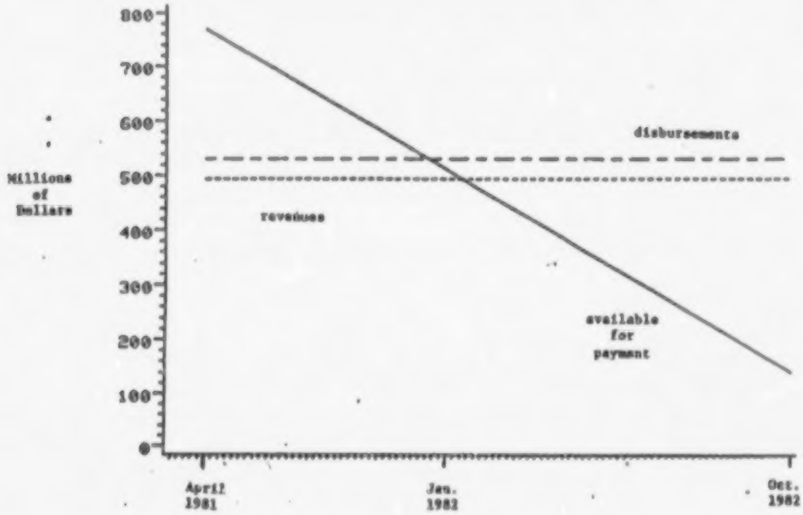


Table 16 shows, under projection "G" the most pessimistic assumption used in the 15th actuarial valuation, projected revenues and reserve balances over the period beginning January 1982 and ending December 1985. The quarterly fluctuation in revenues has been eliminated by averaging annual tax revenues.

Table 16 shows the relationship between the low points in reserves occurring just before the annual FI payment. The table also shows that, under the assumptions in valuation G, the fund deteriorates over the period here shown—the date at which reserves drop below zero occurs earlier each year and the low point plunges deeper at the point before each payment. By 1985, the interchange payment barely restores the reserve line to zero.

Table 16.—PROJECTED OPERATIONS OF RAILROAD RETIREMENT ACCOUNT (JANUARY 1982–DECEMBER 1985) (VALUATION G)

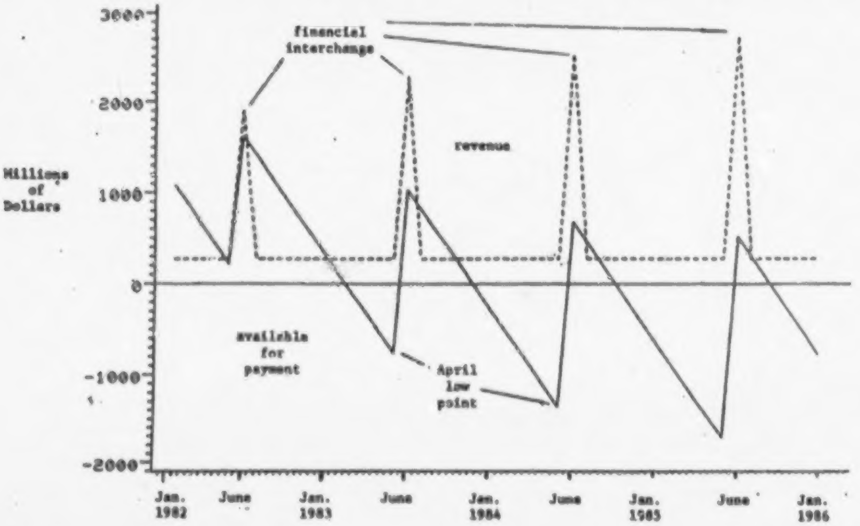
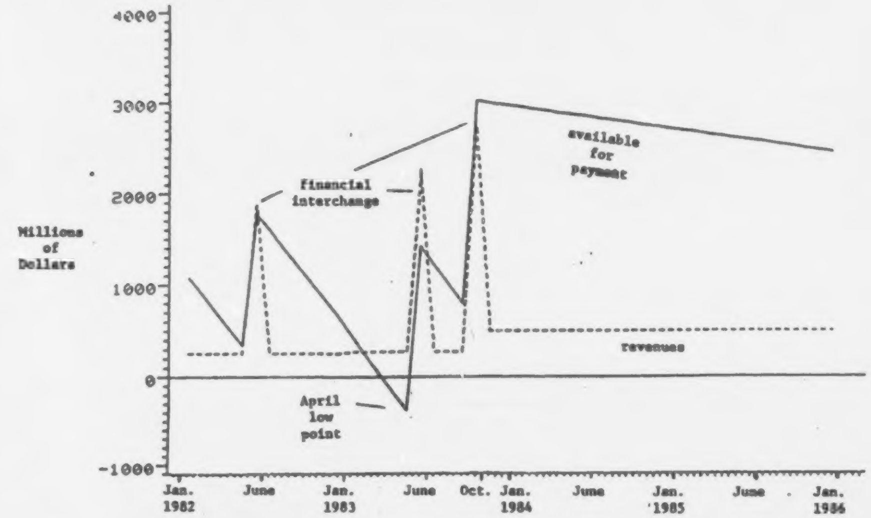


Table 17 shows, using the same assumptions, the effect of turning outstanding amounts owed to RRS by social security into funds available for payment.

In table 17, the FI payments reflecting fiscal years 1981 and 1982 are paid in June 1982 and 1983, respectively. In October 1983, the interchange payment for the period ending the previous month is paid and the relationship is placed upon a current basis. As can be seen by the graph in table 16, this change extends the period of solvency, perhaps as long as 5 years. The change does not restore balance, which can only be accomplished by changing the relationship between taxes and benefits.

Table 17.—PROJECTED OPERATIONS OF RAILROAD RETIREMENT ACCOUNT (JANUARY 1982–DECEMBER 1985) (VALUATION G)



In both of the previous tables, it was assumed that the restoration of liquidity for the outstanding amounts from RUIA and social security would be accomplished through a procedure eliminating the impact of interest on both sides of any transactions. Thus, for purposes of these illustrations, gains of interest for amounts owed to RRS are eliminated as is loss of interest based upon periods when the system is in deficit. Because these transactions all occur within the unified Federal budget, they are all intergovernmental transactions and have no direct effect upon the Federal deficit or upon taxpayers.

(c) Outstanding Windfall Amounts

Under the 1974 act, the RRS trust fund was to be reimbused from the general treasury for all windfall payments. The reasons given at the time for the Federal Government assuming the burden of phasing out windfalls was as follows:

> (1) Windfalls existed because many employees with sufficient service under RRS to qualify for benefits also qualified for social security coverage because of sufficient employment under that program, prior, concurrent, or subsequent to their railroad service. Because this windfall would not have occurred if rail employment had been covered by social security, the cost of windfalls was borne by RRS, even though windfalls were earned outside the rail industry.
>
> (2) The 1951 legislation had treated the windfall issue; when subsequent legislation was offered to eliminate the 1951 windfall restrictions, rail management and most of rail labor opposed that legislation on the grounds that rail pension money would flow to employees who had left the industry; the windfall advantage was paid by rail employees ineligible to receive

> that advantage themselves. Nevertheless, Congress eliminated the restrictions on windfalls.
>
> (3) The 1974 legislation eliminated any further opportunity to qualify for windfalls, while "grandfathering" retirees and employees who had acquired windfall rights prior to 1975. The obligation to fund windfalls from public money during the phaseout period was accepted by Congress because no suitable alternative could be identified.

At the time of the 1974 act, the elimination of windfall opportunities was of primary importance. Funding for the phaseout of windfalls was at first assumed to be a responsibility of social security, given that the existence of windfalls was a result of the social security benefit formula. It was argued that a requirement to fund windfalls from social security funds violated the principle guiding the relationship between the two programs. Neither social security not railroad employees should be penalized because rail employment was not covered by the social security program.

The argument that RRS should fund the phaseout was rejected because (1) the RRS fund was comprised of money set aside for employees of railroads and those businesses objected to their funds being used to pay employees who had left the industry; (2) if RRS funds were used, it would mean that an increasing number of railroad workers would be paying for benefits to which they could never become entitled; (3) the existence of windfalls was a result of actions taken over the years by Congress, as it sought to define the relationship between the two programs; and (4) insufficient money existed within RRS to pay those benefits.

When Congress accepted responsibility for windfall payments, it could have chosen to reimburse annual experience. Instead, it chose to fund the phaseout over 25 years of level payments. There are three major reasons why this may have seemed advisable: (1) given an uncertain number of beneficiaries, with unknown benefit rights, explicit appropriations could be made on a level payment basis with periodic review and reestimation reflected in level payment adjustments. This is a common practice for amortizing unknown liabilities; (2) because the effect of economic factors was also uncertain, periodic readjustments of level payments permitted those factors to be included in the calculation of reimbursement after those factors had developed; and (3) by their nature, level payments would be lower than acutual windfall payments in the early years, and higher in later years; the total number of recipients would peak and then fall as the attrition of eligible recipients occurred.

However, the practical effect of appropriations too small to fully reimburse the fund for current windfall payments was to draw down the fund by the unreimbursed amount. In addition, appropriations were not sufficient to amortize the obligations on a level payment basis. This excerpt, from a General Accounting Office (GAO) report entitled "Keeping the Railroad Retirement Program on Track: Governments and Railroads Should Clarify Roles and Responsibilities," explains the problem:

Faced with the escalating windfall costs in past years, the Congress, at the request of the Office of Management and Budget (OMB), has held appropriations below the Board estimates of amounts needed to pay windfall benefits. The following table (table 18) compares the Board's projections of needed windfall amounts and requested appropriations with actual amounts which the Congress has provided from fiscal year 1976 to 1981.

Although the Board's estimates of needed windfall appropriations have increased from $250 million for fiscal year 1976 to $529 million for fiscal year 1981, the budget requests for appropriations since fiscal year 1977 were less than the estimates. For fiscal years 1977 to 1980, the appropriations requested were less than the Board's estimates primarily because the OMB was studying the windfall issue and had proposed legislation that would reduce such benefits. For example, the Board said it requested only $313 million for each of fiscal years 1979 and 1980 because OMB intended to propose legislation that would, for workers retiring after 1978, (1) no longer index initial windfall benefits for cost-of-living increases, and (2) eliminate the applicability of a minimum benefit provision when calculating windfall amounts. Draft legislation was transmitted to the Congress but was never introduced. For fiscal year 1981, the Board's request for appropriations was less than it said it needed for windfall benefits because OMB proposed legislation placing a cap of $350 million on windfall appropriations.

It can be argued that labor and management negotiators and others involved in the development of the 1974 act based their estimates on the expectations that Congress would fully reimburse windfall payments. According to the 15th valuation, the outstanding windfall amount, plus lost interest, had reached $1,550 million by March 31, 1982.

Industry negotiators are certain to request that Congress consider payment of this past unreimbursed windfall, as the industry struggles to reach agreement on changes to restore the system to balance. One alternative to direct repayment of the entire amount is to consider the amount as an investment in the general treasury, and credit RRS with interest that the investment would be earning. Some amortization of the principal might also be considered.

Table 18.—REIMBURSEMENTS FOR WINDFALL BENEFITS (1975–81)

[In millions of dollars]

Period	Amount appropriated in period	Windfall benefits paid in period	Deficit, end of period, including interest
January–December:			
1975		386	396
1976	[1] 500	390	301
1977		419	748
1978	[1] 563	422	641
1979	313	431	816
1980	313	440	1,063
January–September: 1981	[2] 37	[3] 299	1,448

[1] Includes appropriations for 2 fiscal years.

[2] This is the amount appropriated for fiscal year 1981 ($350 million) less the portion of the fiscal year 1981 appropriation which was actually received in calendar year 1980 ($313 million).

[3] Covers 8 months of benefits since the September accrual amount was paid on October 1.

Source: Railroad Retirement Board, 15th actuarial valuation.

(d) Summary of Options

If all of the benefit changes, and additional revenue sources were enacted, additional taxes would still be required to return the system to balance for the intermediate period. If taxes could be raised to the extent necessary to restore balance, the accounting changes would avert any short-term cash flow crisis. However, in order for RRS financing to be stabilized, either employment will have to level out at the base assumed at the time balance is achieved, or some device to finance additional revenue loss would have to be adopted.

The following table displays the impact of various changes on RRS financing through the remainder of the decade.

Table 19.—OPTIONS TO CORRECT RAILROAD RETIREMENT FROM 1983–92 FINANCING DEFICIENCIES

[In millions of dollars]

	Estimate A	Estimate B
Low point—1992[1]	9,390	12,195
Less existing borrowing authority	2,380	2,730
Net needed under current law	7,010	9,465
Benefit reductions:		
(a) Adjust unrecompensed tier I by tier II COLA:		
(i) Future retirees	430	430
(ii) All retirees	1,000	1,000

Table 19.—OPTIONS TO CORRECT RAILROAD RETIREMENT FROM 1983-92 FINANCING DEFICIENCIES—Continued

[In millions of dollars]

	Estimate A	Estimate B
(b) Flat rate for 60 [1]/30	1,670	1,670
Increase tier II tax:[2]		
(a) 1 percent	1,400	1,300
(b) 2 percent	2,800	2,600
(c) 3 percent	4,200	3,900
Increase asset liquidity:		
(a) Transfer RUIA debt to general fund	800	800
(b) Make relationship with social security current	1,290	1,290
Recover windfall shortage:		
(a) Principal	1,600	1,600
(b) Interest	[3] 1,900	1,900

[1] November 16, 1982, projections.

[2] Cumulative amounts by 1992 if tax is effective Oct. 1, 1983.

[3] Cumulative interest paid by 1992 if principal is not amortized.

NOTE.—This table is based on data provided in the Nov. 16, 1982, memorandum, page 55 and table 11, from the Railroad Retirement Board. Employment assumptions can be found in table 12, page 58.

Source: Hay Associates, from data provided by the Railroad Retirement Board.

(4) EFFECT OF RRS UPON THE FEDERAL BUDGET

The various benefit and administrative accounts under the administration of the Railroad Retirement Board are all operations within the unified Federal budget. Thus, the total effect of those accounts on the budget is equal to the difference between tax receipts and benefit payments. All other transactions are internal to the budget.

It is important to note that the financial interchange between RRS and social security is an intergovernmental transaction and does not, by itself, have any effect upon the budget. Under a strict definition of budget effect as the difference between tax receipts and benefits, it would therefore appear as if RRS has a larger budget impact than it does, given that the FI would not be regarded as income under that definition. However, the financial interchange under this definition would become a savings to social security. The essence of the relationship between RRS, and social security is that the social insurance features of RRS, that duplicate benefits otherwise obligations of social security, are recorded as shared responsibilities.

Because the remaining obligations of RRS are the proper responsibility of the railroad industry, any financing difficulties are generally concerned with the relationship between taxes and benefits within that responsibility. For most purposes, then this relationship may be regarded as the difference between taxes collected for and benefits paid from the railroad unemployment account (RUIA), and the difference between tier II taxes collected and benefits paid (tier II, plus any tier I benefits not recompensated under the FI). The total difference in taxes collected and benefits paid for those two operations was approximately minus $1 billion for calender year 1982. The effect of RRS retirement and unemployment benefits on the unified budget is thus equal to that figure.

If this $1 billion impact on the Federal Budget is to be reduced, it can only be done so by reducing benefits or raising taxes. Of course, a return to a robust economy with a corresponding increase in rail traffic would have a similar effect: employment would rise, and as employment rose, unemployment benefits would fall and payroll taxes rise.

Under projections of current services, if railroad employment does not return to levels assumed under the projections used for the 1981 legislation, RRS will continue to add to the Federal budget deficit. Under current law, the benefit projection feature of the 1981 legislation will require benefit cuts to tier II of about 40 percent beginning October 1, 1983, and 80 percent beginning October 1, 1984. To the extent that any future RRS refinancing package increased taxes and reduces benefits, RRS will contribute to "deficit reduction." All other efforts to improve the balance or cash-flow in RRS accounts will be internal to the budget and will have no impact on RRS beneficiaries and sponsors, or upon the unified Federal budget and Federal taxpayers.

(5) Final Note

Throughout this paper, one conceptual approach has prevailed: every effort has been made to distinguish those aspects of railroad retirement generally thought appropriate to a collectively bargained private pension from those aspects which have become generally associated with the concept of social insurance. The social insurance and private pension aspects of RRS have always been deeply intertwined—the marriage of those two social institutions was an outgrowth of an earlier failure to reconcile the differences between corporate self-interest and collective responsibility in the treatment of aged or disabled workers. That the marriage was destined to fail was probably not adequately appreciated at the time, but the continual legislative effort spent on maintaining the union taught eventually that it must be so: the 1974 act constitutes the separation papers.

The challenge yet to be faced is one in which the obligations appropriate to each social instrument must be clarified. Nearly a half a century has passed since Congress stepped in to assure adequate, equitable, and secure benefits to retired railroad workers. During that time much has been learned about pension financing, and significant changes have occurred in the relationship between beneficiaries and pensions. Of similar importance is the evolving concept of entitlement, and the nature of that relationship between citizen and Government. Because its participants present to RRS, and to the Congress, claims which rest equivocally on principles that are appropriate to each type of relationship but not to both, every effort must be made to resolve RRS financing problems in a manner which clarifies the role each aspect of RRS should play in the complex of retirement benefits earned through rail employment.

Appendix

FINANCIAL OPERATIONS OF THE RAILROAD RETIREMENT BOARD (RRB)

The RRB is charged with administering the RRS and the railroad unemployment and sickness program (RUSP). In performing these responsibilities, the Board uses five accounts with the Federal Treasury. Four accounts provide money for benefit payments, and one pays for certain administrative expenses of the Board. The benefit-paying accounts are the railroad retirement account, the railroad unemployment insurance account, the railroad retirement supplemental account, and the dual benefits payment account. The account that pays administrative costs is the railroad unemployment insurance administration fund.

(A) Railroad Retirement Account (Trust Fund)

(1) RECEIPTS

(a) Taxes

Taxes are imposed by the Railroad Retirement Tax Act. Employers as defined in the Railroad Retirement Tax Act pay employer and employee payroll taxes directly to the Internal Revenue Service (IRS). These tax deposits vary in frequency from weekly to monthly depending upon employer size, and reflect a schedule similar but not identical to that used for the payment of Federal Insurance Contributions Act (FICA) taxes.

Although earnings base maximums are computed and taxes assessed on an annual basis for social security purposes, for railroad retirement tier I purposes the maximums are computed on a monthly basis, i.e., one-twelfth of the annual rate for FICA. Both the employee and covered employer pay 6.7 percent on a monthly earnings base of $2,975 in 1983; the employer and employee finance the tier II benefit (staff portion) with an additional tax of 11.75 percent and 2 percent respectively on a monthly earnings base of $2,200 for 1983. Prior to 1977, the earnings bases on which both railroad retirement and FICA taxes were assessed were equal; however, social security legislation enacted in 1977 changed the previously mandated tax bases and tied the tier I (social security) tax base to the rise in average national wages. That change was not carried through to the Railroad Retirement Tax Act, and the tier II tax base has continued to rise to reflect the annual changes in average wages taxable by social security. From 1974 to September 1981, the employer alone also paid a significantly higher tax rate (9.5 percent) on the tier II wage base to finance the staff portion (tier II) of the railroad retirement benefit. Effective October 1981, the employer pays 11.75 percent and the employee pays 2 percent of the same wage base to finance tier II benefits.

Using a monthly maximum wage base rather than an annual one means that a worker who is employed seasonally and makes the same amount of money as does a worker employed year round, will be credited with, taxed upon and consequently have retirement benefits computed upon less than the year-round worker.

The average time lapse from tax receipt at IRS to credit to the railroad retirement account is approximately 7 days. This lag is due to specialized form submission and manual processing at IRS.

(b) Financial Interchange (FI)

A financial interchange was established by the 1951 amendments to the Railroad Retirement Act (sec. 7(c)(2) of the Railroad Retirement Act of 1974). Its purpose was to place the social security trust funds in the same financial position they would have been in, had all railroad employment been covered as social security earnings. Even though the FI mechanism was not enacted until 1951, its effect was retroactive to 1937; the first FI determination covered the period January 1, 1937, through June 30, 1952, and resulted in a net credit to SSA.

The basic operations of the FI are as follows: RRB pays to SSA the taxes (including hospital insurance (HI) taxes) and interest that has been credited to the railroad retirement account by the IRS that would have been paid to SSA if the compensation had been social security covered employment. The SSA pays to RRB: (1) the amount of benefits that would have been paid to beneficiaries had the railroad work been covered by SSA, plus (2) an amount for administration, plus (3) interest for the period elapsing between benefit payment and RRB's reimbursement. There is at best a 9-month lag and at worst a 20-month lag after the railroad retirement account moneys were paid out before the FI money is credited to the railroad retirement account. Agreement between the two agencies has set the FI due date as the first accounting date in June *after* the close of the fiscal year during which benefits were paid. The methodology and calculations are inspected by SSA, and finally the interchange approval is certified to the Treasury Department.

(1) FINANCIAL INTERCHANGE METHODOLOGY: TAX CALCULATION. The RRB maintains a 1-percent sample of the gross earnings record from all covered employers. This sample is used to extrapolate to an "adjusted payroll" to determine what FICA taxes would have been paid for the universe of railroad workers. These figures are adjusted to account for self-employment and multiple employers on the same account. Because RRB credits earnings by a monthly rather than an annual wage base, a worker who is employed seasonally, but earns the same total annual salary as does an employee who works each month for a lesser amount, creates a "loss"

for the railroad retirement account in the FI. Since FICA taxes would have been collected on the annual earnings amount, the Board transfers more taxes to SSA than were actually paid in because, in this situation, the monthly earnings/tax maximum generates fewer tax dollars.

(2) Benefit Calculation. The RRB maintains a corresponding 1-percent sample of all railroad retirement beneficiaries. These cases are used to compute what the actual social security benefit would have been, using railroad retirement compensation, social security wages, and the results of a 1-percent sample of gross earnings. Because railroad retirement taxes are based on a monthly maximum and social security taxes are based on an annual maximum wage base, actual social security taxable earnings on which social security benefits are computed may differ from the railroad retirement taxable compensation because of when the compensation was earned. This 1-percent sample is then stratified by benefit type and inflated to represent the entire universe of beneficiaries.

(3) Administrative Expenses. The SSA computes its administrative costs on a per claim paid/maintained basis and notifies the Board annually. These per unit costs are then applied to the universe counts of claims awarded and benefit accounts maintained by the Board.

(4) Interest Calculation. There are two separate interest calculations: (1) the RRB determines how much interest benefit moneys would have generated for the railroad retirement account (using the average interest rate for the year for the social security trust fund) had the money not been used to pay benefits, plus (2) a "lag interest" accrued to the total amount owed for the period from the end of the fiscal year in which paid out to the transfer date, which is usually June 2, the first accounting date in June. The above calculations and determinations are made separately for OASI claims/taxes, and DI claims/taxes and medicare (HI) taxes.

The following table displays FI experience over the history of the transaction.

Table 20.—EXPERIENCE OF RAILROAD RETIREMENT ACCOUNT UNDER FINANCIAL INTERCHANGE WITH SOCIAL SECURITY (OASDI) TRUST FUNDS, 1937-81

[Dollars in millions]

Determination number	Fiscal years covered	Benefit credits to railroad retirement account [1]	Tax credits to OASDI funds	Cash transfers to railroad retirement account	
				Amount	Year of transfer
1-11	[2] 1937-62	$5,229.3	$3,367.6	[2] $1,813.4	[2] 1953-63
12	1963	679.2	276.2	421.8	1964
13	1964	727.8	290.3	459.3	1965
14	1965	737.6	291.7	468.8	1966
15	1966	817.3	306.0	538.7	1967

Table 20.—EXPERIENCE OF RAILROAD RETIREMENT ACCOUNT UNDER FINANCIAL INTERCHANGE WITH SOCIAL SECURITY (OASDI) TRUST FUNDS, 1937-81—Continued

[Dollars in millions]

Determination number	Fiscal years covered	Benefit credits to railroad retirement account [1]	Tax credits to OASDI funds	Cash transfers to railroad retirement account	
				Amount	Year of transfer
16	1967	806.4	373.0	458.0	1968
17	1968	848.2	364.2	512.8	1969
18	1969	961.3	408.1	589.3	1970
19	1970	1,018.4	436.7	626.3	1971
20	1971	1,155.8	458.5	748.5	1972
21	1972	1,217.1	470.9	802.5	1973
22	1973	1,412.8	556.4	930.9	1974
23	1974	1,575.6	653.5	1,010.3	1975
24	1975	1,853.3	718.7	1,238.7	1976
25	1976	1,872.2	772.0	1,207.5	1977
26	[3] 1977	2,556.6	1,060.8	1,618.5	1978
27	1978	2,230.3	902.6	1,477.4	1979
28	1979	2,389.5	1,089.9	1,429.9	1980
29	1980	2,683.4	1,204.8	1,614.4	1981
Total	1937-80	30,772.1	14,001.9	17,967.0	

[1] Benefit credits include allowances for administrative expenses and adjustments in previous determinations.

[2] First determination covered the period January 1937–June 1952. Initial balance of $488.2 million was never transferred to OASDI funds; only interest was paid until that debt was liquidated by subsequent offsets in favor of the railroad retirement account. Total interest was $35.4 million.

[3] The 1977 figure covered 15 months (July 1976 to September 1977) due to the change in the definition of the fiscal year.

NOTE.—The cash transfers include interest which is not shown in the table. The total gain from the FI including estimated interest earnings from the time of transfer to Dec. 31, 1981, was about $35,305 million. The FI transactions with the HI trust fund are not included. These involve mainly a transfer of collected taxes to the HI trust fund with some adjustments for the difference in the earnings bases under the two systems.

Source: Railroad Retirement Board, 15th Actuarial Valuation.

(c) Loans From the General Revenue Fund

Amendments to the Railroad Retirement Act of 1974 enacted in the Omnibus Budget Reconciliation Act of 1981 (OBRA) gave RRB the authority to borrow, from general revenue funds, amounts totaling the full amount of FI money due to the railroad retirement fund during that fiscal year. Although the railroad retirement fund currently accrues FI liabilities, the Treasury Department has advised that the total amount that can be borrowed is limited to the established FI amount for the full *previous* fiscal year.

Statutorily, the Board may borrow these general revenue funds only when there are insufficient trust fund assets to meet benefit payment obligations. On May 13, 1982, the Board used that borrowing authority for the first time; it borrowed $50 million. (An average monthly benefit liability equals about $435 million.) The loan was repaid on May 11, 1982; interest of $156,712 (14.3 percent) was also repaid. The statute gives the Board two options for repaying the loan: (1) it may be paid back as soon as sufficient assets are available (i.e., taxes credited by IRS to the railroad retirement fund); or (2) an "open balance" may be maintained but must be repaid with interest not later than 10 days after the FI money is actually received from SSA.

Current actuarial projections indicate that the Board will need to exercise its borrowing authority to cover the February 1, 1983, benefit payment liability; it estimates that $370 million will be needed. It is currently estimated that the Board will need to borrow a total of approximately $1,050 million through June 1, 1983; $350 million in February; $20 million in March; $210 million in April; and $450 million in May. This liability is secured by a total FI transfer of $1,885 million due on June 2, 1983. Section 22 of the Railroad Retirement Act requires the Board to report to the President and the Congress before April 1 of any year in which the Board borrows 50 percent or more of the expected FI money. The Board must also promulgate regulations to cut back benefits, but to not less than social security level payments for any annuitant, so that total expenditures do not exceed available funds.

(1) MECHANICS. The Board computes the amount of funds that are needed to meet obligations and authorizes the borrowing authority to be invoked. The Treasury Department is advised in writing of the amount of general funds needed to be transferred, with the citation of the Board's statutory authority to request the loan. The borrowed money is transferred directly into a non-interest-bearing cash account, not into the railroad retirement account. The Board may repay the loan not later than the 10th day after receipt of the FI transfer. The Treasury Department will, at that time, quote to the Board the most recent results of the auction of Treasury bills. Application of the statutory formula to that quoted rate determines the loan interest due.

(d) Reimbursable Medicare

Each fiscal year, RRB computes an estimated amount equal to the costs of Medicare administration due for the prospective fiscal year. The billing is adjusted after the close of the fiscal year.

(e) Investment Income

The Railroad Retirement Act of 1974 gave RRB greater authority over trust fund investments. Pursuant to the 1979 agreement with the Treasury Department, funds in the railroad retirement account are invested in two types of specially created federally financed instruments: (1) par-value special issues with a maturity at the end of the month of purchase, and (2) market-based specials. Investments pursuant to the agreement have enabled the Board to greatly increase the account's investment income; the railroad retirement account moneys cannot be invested in any Government security that provides a yield lower than the par-based specials. The RRB Investment Committee meets frequently to determine the course of investment action based upon receipts expected, payments due, and current interest rates. The Treasury Department automatically invests money credited to the railroad retirement account based on predirected investing procedures initiated by the Board.

Prior to the 1979 investment agreement, the Treasury Department redeemed RRB securities on a last-in-first-out system. Because of economic conditions at that time, that practice generally resulted in redemption of securities earning higher rates of interest, leaving the remainder of the trust fund money in lower-yield Government securities. Now, the Board directs the Treasury Department specifically which securities to redeem.

Interest income is maximized by taking advantage of the "float" involved in the issuance of checks. For example, when each month's computer tapes are released to the Treasury Department to issue the regular monthly benefits, only enough investment notes are redeemed on the first working day of the month to cover benefit payments made by electronic funds transfer (EFT-direct deposit). The Board will then ask the Treasury to redeem the outstanding balance of the monthly obligations on the third or fourth working day of the month, when most of the checks will be presented to the Federal Reserve for payment. In redeeming its securities, the Board requests the Treasury to cash in the needed securities; the Board may buy and sell securities in any amount. The Treasury Department redeems them by either (1) extinguishing the notes from the books and issuing other debt notes, or (2) putting the Board-held notes on the open market. Whatever the method, the cash is immediately transferred to the railroad retirement account to cover the obligation. A similar redemption call is made for administrative expenses and daily benefit issue activity.

(f) Other Income

The railroad retirement account also derives income from interest on loans it makes to the railroad UI account. At the close of fiscal year 1982, there was a total outstanding loan of $286 million; this amount constitutes principal only because all outstanding interest is paid to the railroad retirement account as of September 30 each year, even if more money has to be borrowed to finance the interest payment. The interest due the railroad retirement account is equal to the average rate of interest paid to the railroad retirement account by all the special obligations on the last day of the fiscal year.

General revenue funds are authorized to be transferred to the railroad retirement account to compensate the trust fund for paying benefits based on military services for which no reimbursement was received either in the FI system or under the reimbursement system authorized in the 1937 Railroad Retirement Act. Because no taxes were paid on this service the Federal Government assumed this liability. At the end of each fiscal year, RRB computes the amount of benefits paid out based on that service plus the interest on the trust fund moneys that was lost because of the payment of those unfunded obligations. The total amount may be transferred by the Treasury to the railroad retirement account.

The 1974 Railroad Retirement Act lowered the dollar amounts of supplemental annuities payable (ranging from $23-$43 vs. $45-$70 monthly). However, the 1974 act also eliminated any reduction imposed on the regular railroad retirement annuities received by retirees also eligible for the supplemental annuity. The net yield to the beneficiary was approximately equal. The Railroad Retirement Tax Act continued the supplemental annuity tax levy at a rate high enough to support the 1937 act level. The Board sets this tax rate quarterly. Because those beneficiaries who were previously awarded the higher rate of supplemental annuity (with the annuity reduction) continue to receive that higher rate, while new entitlements, although roughly the same total amounts, are based on a lower rate with no annuity reduction, the railroad retirement account suffers a net loss. To compensate the account for any loss sustained because of elimination of the reduction, only that portion of the supplemental annuity taxes necessary to pay supplemental annuities at the 1974 act level is appropriated to the railroad retirement supplemental account. The remaining portion is appropriated to the railroad retirement account. Currently, the railroad account receives 24.4 percent of the taxes levied under sections 3211(b) and 3221(c) of the Railroad Retirement Tax Act.

(2) DISBURSEMENTS

(a) Regular Railroad Retirement Benefits

The railroad retirement disbursement account is monitored to insure there are enough liquid assets to meet immediate obligations, but not more than is necessary to maximize the investment interest accruing to the railroad retirement trust fund. For regular issuance of the monthly benefit payments, the Board requests the Treasury Department to redeem on the first working day of the month only enough securities to cover payments that are actually due on that day—those benefit payments made via EFT-direct deposit.[1]

Securities covering the remainder of the monthly check issue obligation are requested to be redeemed on the third and fourth working day of the month, the approximate time by which the Federal Reserve would have to honor the checks. Securites are requested to be redeemed as often as daily to cover award activity made daily throughout the month.

(b) Railroad Retirement Act Administration

As with railroad retirement benefits, administration expenses are paid out of the railroad retirement account, from the deposits made to it by the redemption of trust fund securities. The Board spends approximately three-quarters of 1 percent (0.75 percent) of benefits paid for administrative costs each year.

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[1] Currently, the Board pays approximately 30 percent of its regular monthly issue via EFT. Should the rate of direct deposit participation increase substantially, this would significantly reduce on the amount of interest the Board realizes by using the "float" aspects of regular check cashing.

(c) Loans to the Railroad Unemployment Insurance Account (RUIA)

Section 10(d) of the Railroad Unemployemnt Insurance Act requires that fund to borrow from the railroad retirement account when its estimated obligations exceed current assets. Since the contributions are collected and paid to the RRB on a quarterly basis, the current high rate of unemployment forces the RUIA to borrow from the railroad retirement account usually during the first two months of each calendar quarter because statutory language constrains both the rate of tax assessment (varying from 0.5 percent to 8 percent depending on the balance in the RUIA) and the wage base (the first $400 of compensation earned in a month). At the end of fiscal year 1982, a debt of $286 million was owed to the railroad retirement account.

(d) Social Security Benefits Paid by the Railroad Retirement Board (RRB)

In general, the RRB *pays* the social security benefit to those qualified railroad retirement beneficiaries who first became entitled to social security benefits after December 31, 1974; those claims are adjudicated, however, by SSA. The Board certifies those benefits for payment by the Treasury Department in its regular benefit payment system, with the same frequency as it issues payments for regular railroad retirement benefits. Immediately prior to the release of the payments, the Board requests the Treasury Department to transfer to the railroad retirement account the total amount of social security OASI and DI funds payable on that date. The payments/checks are drawn on the railroad retirement account, even though they represent social security benefit payments.

(B) Railroad Unemployment Insurance Account (RUIA)

Section 10 of the Railroad Unemployment Insurance Act authorized the establishment of RUIA within the structure of the UI trust fund under the control of the Department of Labor (DOL). All States, District of Columbia, Puerto Rico, and the Virgin Islands also maintain accounts within this trust fund; the RUIA is administered and treated as if it were the 54th "State" account.

(1) RECEIPTS

(a) Contributions

Both the wage base and the tax rate are fixed by law. Currently, the first $400 of compensation in each month constitutes the taxable wage base. The tax rate varies from 0.5 percent to 8 percent and is determined annually based on the balance in the RUIA. The amount of contributions actually based on the balance in the RUIA. The amount of contributions actually credited to the account is a function of both the tax rate and wage base. Administrative costs are subtracted from the gross contributions and credited to a separate administrative account. Five-tenths of 1 percent of the total compensation upon which the contributions are based is subtracted from the total contribution amount, before the contributions are credited to the RUIA for benefit payment.

Employers remit the contributions quarterly either to the RRB or directly to the Federal Reserve Bank through the Treasury financial communication system. Those payments are due on the last day of the second month after the end of each calendar quarter.

(b) Interest Collected

Two main sources of interest are credited to the RUIA. First, an interest charge of 1 percent per month on the total outstanding contributions is charged to an employer who fails to pay the full contribution amount to either the Board or the Federal Reserve by the end of the second month following the end of each calendar quarter.

The second type of interest collected is from the investment of the trust fund moneys. The Board has no control over the investment of the RUIA money because the account is only one of the accounts which comprise the UI trust fund estalished by section 904 of the Social Security Act and managed by the DOL. On the last day of each calendar quarter, Treasury credits to each individual account in UI trust fund, its proportionate amount of the earnings of the fund, based upon the individual account's average daily balance.

(c) Transferred Money

There is language in the Railroad Unemployment Insurance Act prohibiting the railroad UI administration fund to carry a balance exceeding $6 million at the end of each fiscal year. When that amount is reached, the law provides for the excess to be transferred into the RUIA for benefit payment use.

(d) Loans

Section 10(d) of the Railroad Unemployment Insurance Act contains language which requires the Board to loan money from the railroad retirement account (trust fund) to the RUIA whenever the balance of that account is insufficient to cover obligations. This regularly happens in the latter part of the calendar quarter during periods of high unemployment; receipt of the contributions at the beginning of the following calendar quarter normally permits repayment of the loan with accrued interest. Continued periods of high unemployment coupled with decreasing work force on which contributions are based (revenue) create a drain on the fund and impair its ability to pay its debts to the railroad retirement account. By the end of fiscal year 1982, the RUIA had loans exceeding $286 million owed to the railroad retirement account.

(2) DISBURSEMENTS

(a) Benefit Payment

The RRB adjudicates the claims for unemployment benefits and, on a daily basis, certifies those claims to the Treasury Department for payment. Although the Board does not control the investment and redemption of securities in which this account's assets are placed, the Board monitors the account balance to insure a sufficient level of funds is maintained to meet obligations. The Board determines the amount and timing of any fund transfers from the RRA to effect needed loans. This account is permanently appropriated to insure continuity of benefits and administrative capabilities parallel to those of unemployment accounts of States.

(b) Repayment of Loans

The loans made to the RUIA from the railroad retirement account are repaid at an interest rate equal to the average rate of interest of all the special obligations in which the railroad retirement account is invested. When RUIA levels are high enough to meet its obligations, the Board then requests the Treasury to transfer funds back to the railroad retirement account.

(C) Railroad Retirement Supplemental Account (Trust Fund)

Under the 1974 Railroad Retirement Act railroad employees who retire with at least 25 years of creditable railroad service (at least 1 month of which occurred prior to October 1, 1981) and a current connection with the railroad industry may be entitled to a supplemental annuity equal to $23 plus $4 for each year of service over 25, up to a maximum of $43 per month. Those beneficiaries who were awarded supplemental annuities under the 1937 Railroad Retirement Act receive amounts ranging from $45–$70, but their regular annuities are reduced for receipt of the supplemental annuity. These staff pensions are based on longevity and, on a pay-as-you-go basis, are financed entirely by an excise tax imposed on employers based on the number of compensated staff hours generated by that employer. However, employers whose employees are covered by a supplemental pension plan established through a collective bargaining agreement are exempt from the staff hour tax; these employers pay a tax equal to the amount of any supplemental annuity paid by the Board plus administrative expenses.

(1) RECEIPTS

(a) Taxes

Each quarter the Board makes an estimate of the amount of money needed to pay supplemental annuity benefits and their administrative expenses, and the expected number of taxable staff hours of compensation. The Board is then authorized to set a tax rate that would assure sufficient funds to cover obligations for that prospective calendar quarter. Taxation authority is derived from the Railroad Retirment Tax Act; 100 percent of the taxes levied under section 3221(d), plus currently 75.6 percent of taxes levied under sections 3211(b) and 3221(c) are credited to the supplemental account.

(1) TAX CREDITS AND LIABILITIES. If an employee is simultaneously entitled to a supplemental pension to which the employer has contributed, that portion of the supplemental pension attributable to employer contribution is subtracted from the supplemental annuity amount payable. That employer is then allowed a credit against its

tax liability equal to the total amount of reduction in supplemental annuities attributable to its employees. These credits are accumulated for the calendar quarter, and then the Board computes and certifies to the Treasury Department the net tax liability attributable to each employer.

(b) Loans

Section 15(c) of the Railroad Retirement Act of 1974 permits the board to loan from the railroad retirement account to the supplemental account, moneys necessary to pay supplemental annuity obligations when the supplemental account balance is insufficient to do so. To date, the supplemental account has never exercised its authority to borrow money from the railroad retirement account.

(c) Investments

Supplemental account assets are invested in the same manner as are those of the railroad retirement account, i.e., par-value specials and market-based specials. Interest derived from those investments is credited to the supplemental account.

(2) DISBURSEMENTS

(a) Supplemental Annuity Payments

Supplemental annuity payments are released to entitled beneficiaries in the same check as the regular railroad retirement benefit. No supplemental annuity is due for months in which no portion of the retirement annuity is payable. The same security redemption timetable and practices are followed to credit money to the railroad retirement account as are used for the investments and transfers from the railroad retirement trust fund.

(b) Administrative Costs

Since the supplemental account bears all the costs of the administration of the program, the Board requests the Treasury to transfer funds covering administrative costs from the supplemental account to the railroad retirement account at the time as the administrative costs come due.

(c) Loan Repayments

When the balance in the supplemental account is sufficient to pay its current obligations, the Board will transfer any borrowed money back to the railroad retirement account. The interest on any loan would be computed using a rate equal to the average rate of interest borne by all the securities held by the railroad retirement account on the last day of the preceding fiscal year.

(D) Railroad Unemployment Insurance (UI) Administration Fund

Section 11(a) of the Railroad Unemployment Insurance Act establishes a separate fund for administration expenses incurred. This administration fund is set up as another individual "account" in the UI trust fund which is under the overall control of the DOL.

(1) RECEIPTS

(a) Contributions

The amount of money credited to the railroad UI administrative fund is a function of the tax base. Regardless of the contribution rate imposed on the wage base, the amount of funds earmarked for administration purposes equals one-half of 1 percent of the total compensation on which the contributions are based.

(b) Interest

The DOL controls the investment and redemption of securities in which the UI trust fund is invested. The railroad UI administration fund is only one of the accounts which comprise the trust fund established by section 904 of the Social Security Act. On the last day of each calendar quarter, Treasury credits to the railroad UI administrative fund a proportionate amount of the earnings of the trust fund, based on the railroad UI administration fund's average daily balance during that quarter.

(2) DISBURSEMENTS

(a) Administrative Payments

The RRB determines the cost incurred in administering the Railroad Unemployment Insurance Act and charges those expenses against the fund. This fund has a permanent appropriation to assure continuity of benefit payment.

(b) Transfers

The Railroad Unemployment Insurance Act established $6 million as the maximum amount the railroad UI administration fund may hold as of the end of each fiscal year. If on September 30, the balance of the administration fund exceeds $6 million, all excess money must be transferred to the railroad UI account for benefit payment purposes.

(E) Dual Benefits Payments Account

The 1981 amendments to the Railroad Retirement Act of 1974 (enacted by the Omnibus Budget Reconciliation Act (OBRA) of 1981 created a separate account from which all dual benefit payments (windfall) amounts must be paid. This account is funded by the appropriation of general revenue funds. Should the funds appropriated be less than what is needed to pay full benefits over the fiscal year, the Board is required to reduce all windfall benefits so that the payment rate is as stable as practical throughout the fiscal year.

(1) RECEIPTS

General revenue funds are specifically appropriated to this account by the Congress. Since there have been only continuing resolutions since this fund was established, the Board has received a percentage of the total expected appropriation based upon the length of time covered by the continuing resolution. For example, fiscal year 1983 started with a continuing resolution lasting through December 17, 1982. The Board received approximately one quarter of the $430 million full appropriation because, during the period covered by the continuing resolution, 3 months of windfall benefits were to be paid. However, windfall payment is an ever-decreasing payment liability, therefore, slightly more than one quarter of the full funding amount ($109 million vs. $107.5 million) was needed to make the first quarter's payments.

The Treasury Department transferred the full amount due the Board for the period covering the continuing resolution. This was placed in a non-interest-bearing account pending the receipt of a Comptroller General's decision regarding the Board's exercising its statutory authority to invest dual benefit payment account money in the same fashion as funds in the regular railroad retirement account (e.g., market-based specials and par-value specials).

(2) INTEREST

Several questions are pending resolution by the Comptroller General: (1) Can the Board exercise its investment authority regarding dual benefit payment account money because the OBRA language included that account under the investment authority of the Board as contained in section 15 of the Railroad Retirement Act? (2) How can such interest be used—to offset further appropriations from the general revenue fund or applied to the railroad retirement account? and (3) Can a balance in the dual benefit payment account be carried over to another fiscal year?

(3) LOANS

The Board has statutory authority to borrow once each fiscal year from the railroad retirement account one-twelfth of the expected annual expenditure for windfall payments. It appears that the intent of this legislation was to prevent the interruption of dual benefit payments because of the lack of an appropriation or continuing resolution. Legislative history points toward the interpretation that the borrowing authority was created to assure payments during the period between the start of a fiscal year and the date the dual benefit appropriation is received. It has been requested that the Comptroller General define the specific circumstances necessary for the borrowing to take place. One interpretation is that the borrowing authority can be used only during the period after the enactment of a continuing resolution or appropriation, but before the issuance of a warrant.

During the first few days of both fiscal years 1982 and 1983, the Board had set into motion the steps to commence borrowing. The borrowing authority was used neither time because a continuing resolution was passed in time for payments.

(4) DISBURSEMENTS

Since questions are still unresolved regarding the Board's ability to invest these funds, currently the dual benefit payment account money behaves as regular general funds appropriation—the total amount (prorated for the continuing resolution period) is placed in a non-interest-bearing account. Monthly, as the benefits came due, Treasury transfers the total amount of windfall benefits due the railroad retirement account because windfall benefits are combined in the regular retirement payment issues and the checks are honored and funds disbursed through the Federal Reserve.

APPENDIXES

Appendix A

Income of the Elderly

by

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INCOME OF THE ELDERLY

As options for strengthening the financing of work-related entitlement programs are developed, questions of income adequacy, income sources, and income needs of particular groups of the elderly should be considered. This appendix details the income sources of the elderly.

Characteristics of the Elderly

According to the March 1980 census,[1] more than 25.5 million persons 65 years old and over lived in the United States in 1980 (chart 1). Almost 10 million of those individuals were 75 years old and over. The proportion of the population 65 and over has been increasing since the turn of the century, and projections are that it will continue to increase well into the next century. Increasing life expectancy and decreasing birth rates have led to a more elderly population.

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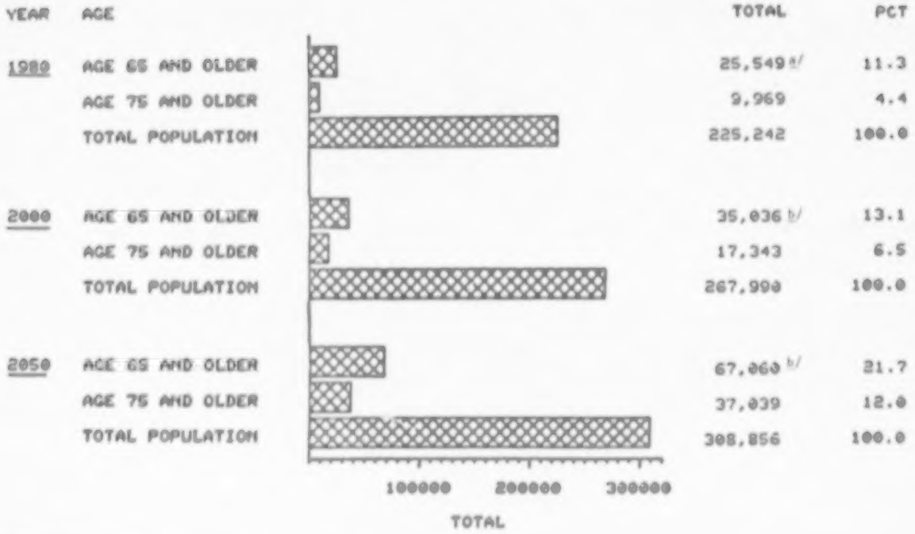
[1] U.S. Bureau of the Census. Unpublished data from the 1980 decennial census, 1983.

CHART 1

U.S. POPULATION: YEARS 1980, 2000 AND 2050

TOTAL POPULATION BY AGE CATEGORY (IN THOUSANDS)



a/ U.S. Bureau of the Census. Unpublished data from the 1980 decennial census, 1983.
b/ Census Bureau Middle Series Projection, published October 1982.

The Bureau of the Census has developed three alternative population projections using different fertility assumptions. All three projections show a continued aging of the population, with an increasing percentage of the population age 65 and over. The expansion of the elderly population will be especially significant between 2008 and 2030, when the baby boom generation reaches retirement age. The Bureau of the Census projects more than 35 million persons 65 years old by the year 2000, and more than 67 million by 2050.[2]

This appendix reviews the income of elderly people in two distinct living situations: (1) an elderly person living with his or her family;[3] and (2) an elderly single person living alone or not with members of his or her family.[4] Unless otherwise noted all the data presented in this paper deal with noninstitutionalized people age 65 or more.

There are 14.7 million[5] elderly persons living in families and nearly 10 million elderly persons living as single individuals. Thus, roughly 60 percent live in families—which could include either elderly couples living together or elderly persons living with children or other relatives.

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[2] October 1982 Middle Series Projections, U.S. Bureau of the Census.

[3] As in the usage of the Bureau of the Census, family is defined as two or more people (one of whom is the householder) related by birth, marriage, or adoption and residing together.

[4] A single person or unrelated individual is any individual age 65 or older (other than inmates of institutions) who is not living with any relatives. An unrelated individual may (1) constitute a one-person household, (2) be part of a household including one or more other families or unrelated individuals, or (3) reside in group quarters such as a rooming house.

[5] U.S. Bureau of the Census. Current Population Survey (CPS), March 1981.

Income of the elderly varies substantially depending on whether they live as single individuals or in a family. However, this classification fails to identify certain situations and circumstances under which the elderly may be living. A group house of elderly singles would be analyzed only at the individual level, although high probability exists that goods and resources are being shared. This may underestimate the quality of their living situation. On the other hand, the inclusion of the elderly people living in a larger family may reflect the inability of an older couple or individual to survive on their retirement income only, thus forcing them to live with their children or other relatives.

Retirement Income Planning

Retirement planning is a relatively new phenomenon. Prior to the 20th century, many people expected to work all their lives. Over a period of five decades prior to the Great Depression, retirement programs evolved as a humane way to deal with workers no longer able to perform adequately, and to make room for younger workers. Today, most individuals plan for retirement and look to three sources of income after they cease work: social security, other pensions, and accumulation of personal assets.

Originally designed to fill part of the income gap for those no longer able to earn an income due to age, social security began as old-age insurance. It subsequently was expanded to include survivor benefits, and later disability insurance, which was designed to partially replace a portion of earnings lost due to death or disability. Today, most people view retirement as a right, earned by working for a specified period and/or reaching a particular age, rather than as a consequence of having lost the ability to work.

Social security was never intended to be the sole source of retirement income. Instead, it was seen as one portion of retirement income; private pensions and personal savings being the other two major components. People generally are advised to plan rationally for their retirement, building up pension benefits and savings that will support them adequately in their retirement. However, several factors can hinder such rational planning: frequent job changes, intermittent work or layoffs that make it difficult to accrue pension benefits; inflation that can erode even substantial savings or pension benefits to the point of inadequacy; a long retirement that can deplete savings; and large expenses for health care or long-term nursing home care that may be well beyond the income capacity of many.

While careful planning can provide an initially adequate retirement income, factors affecting income adequacy often are beyond the control of the individual. For example, those who suffer frequent unemployment and those who work in low-wage jobs may be unable to defer the consumption of their current income for use in old age.

(A) INCOME ADEQUACY—REPLACEMENT RATES

The adequacy of retirement income is usually measured by: (1) replacement rates, and (2) general income adequacy standards, such as the poverty line. A replacement rate is the proportion of a person's preretirement income that is covered by his/her retirement income. A person earning $50,000 in the year prior to retirement who has a total retirement income of $30,000 in the first year of retirement has a gross replacement rate of three-fifths. A given standard-of-living can be maintained after retirement with something less than 100 percent of pre-retirement earnings. A combination of various tax laws at Federal, State, and local levels usually enhances a person's tax status after retirement, especially for those in higher tax brackets prior to retirement. Retired persons no longer have work-related expenses or the expenses of raising a family. Many retirees already have completed the purchase of a home, and most are eligible to receive "senior citizen" discounts on some purchases. On the other hand, older persons—particularly those age 75 and over—have higher medical expenses, and their decreased mobility may increase other costs as well.

In calculating replacement rates, two factors need to be considered: (1) what time period should be covered, and (2) whether the rate should be calculated based on individual or family income. The notion of tying the adequacy of a retirement income to prior earnings appears not only at the evaluation stage, but also in the actual determination of pension and/or social security benefits. For example, social security benefits are calculated on average indexed monthly earnings (AIME), which are based upon average earnings after each year's salary has been adjusted for changes in the wage rate over time. On the other hand, private pension plans commonly rely upon the highest 5 years average earnings, and the Federal civil service retirement system uses the highest 3 consecutive years average earnings.

(B) INCOME ADEQUACY—GENERAL INCOME ADEQUACY STANDARDS

Adequacy of retirement income can be evaluated against a general income adequacy standard. Such standards can be the poverty line, some level above the poverty line (such as 125 percent of poverty), the Bureau of Labor Statistics (BLS) Retired Couples' Budget, or a similar standard.[6] This general income adequacy approach is used most frequently in discussing problems of poverty among the elderly and can be used to measure income adequacy for those with no or very low earnings.

A 1978 study for the Business Roundtable states:

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[6] The poverty line is calculated on the basis of the cost of food and is updated annually through the Consumer Price Index (CPI). The Retired Couples' Budget is calculated at three levels of urban living: lower, intermediate, and higher. Developed by BLS, this budget was updated based on the CPI. (The series has been ended with a final publication in 1982.) Criticisms are leveled against the use of both the poverty index and Retired Couples' Budget: the CPI adjustment may be inappropriate for the elderly, the relationship of food to nonfood costs in the poverty index may be inaccurate, and in the Retired Couples' Budget the needs of the single person may be inadequately measured or addressed.

> At lower income levels, the pure percentage relationship of retirement income to preretirement income is less significant than the issue of meeting a basic dollar level of income needs. Or, stated another way, the standard of living may be more appropriately described by how well basic income needs are met, than by a percentage of preretirement income at some levels. (Towers, Perrin, Foster, Crosby, unpublished study.)

Such a standard (which can be adjusted for inflation and changes in levels of living) also is useful in measuring income adequacy in the years following retirement when straight replacement rates become less meaningful because of inflation and rising standards of living.

Because replacement rates and general income standards measure only money income, neither may be a complete measure of income adequacy. In addition to money income, most elderly retirees receive in-kind income such as medicare benefits, as well as favored tax treatment. Many utilize food stamps.

While it is very difficult to assign a monetary value to the in-kind benefits and special tax treatment received by the elderly, both should be taken into account when judging the adequacy of retirees' income. The Bureau of the Census has addressed the question of measuring in-kind benefits when counting the number of people in poverty.[7] It has proposed three alternative methods for valuing in-kind income: (1) market value (benefit equal to the private market price of goods and services), (2) cash equivalent (benefit equal to the amount of cash the recipient would accept in lieu of the goods and services), and (3) poverty budget share (benefit equal to the usual amount spent on the goods and services by persons with incomes at the poverty level). The Bureau also points out that the poverty rates for households maintained by those age 65 and over are sensitive to valuing in-kind benefits, especially the value of medicaid for institutional care. Those age 65 and older experience the smallest relative reduction in poverty when only food and housing subsidies are considered and the largest reduction when medical benefits also are considered.

Income Sources of the Elderly

Social security is the most common source of income for the elderly. Ninety-two percent of families with a member 65 or older and 93 percent of single individuals 65 or older received income from social security or railroad retirement in 1981. As seen in table 1, 5.3 percent of families with a member 65 or older and 15.5 percent of single individuals 65 or older have no income other than their social security benefit. In addition, another 2.2 percent of these families and 6.1 percent of these single individuals receive income only from social security and supplemental security income (SSI).

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[7] U.S. Department of Commerce. Bureau of the Census. "Alternative Methods for Valuing Selected In-Kind Transfer Benefits and Measuring Their Effect on Poverty." Timothy M. Smeeding, March 1982.

Table 1.—SELECTED INCOME COMBINATIONS OF THE ELDERLY: NUMBERS AND PERCENT DISTRIBUTION

Income source—1981	Families[1]		Single individuals[2]	
	Percent	Number	Percent	Number
Social security only	5.3	589,601	15.5	1,262,291
Social security and SSI only	2.2	249,126	6.1	499,045
Social security, SSI, and public assistance[3] only	.2	[4] 19,425	.3	[4] 21,798
Social security and earnings	4.8	531,987	1.9	152,376

[1] Families with at least one member age 65 or older.

[2] Unrelated individuals age 65 or older.

[3] Public assistance payments such as aid to families with dependent children and general assistance. Vendor payments are excluded.

[4] All the numbers in this table are sample estimates of the population and therefore subject to sampling error. Sampling error may be substantial for numbers below 100,000.

Source: March 1982 Current Population Survey.

In addition to receiving social security payments, many elderly also receive payments from employee pension plans. In 1981, 40.9 percent of families with a member over 65 and 26.3 percent of single individuals over 65 received a private or Government pension. The median amount received was $3,660 for families and $2,401 for single individuals.

The share of the work force covered by employee pension plans is an important factor in designing retirement income policy. Using 1979 data, the President's Commission on Pension Policy found that 48 percent of workers were covered by employee pensions,[8] where workers were defined as all private wage and salary workers and State and local government workers age 16 and over. A further examination of the data revealed that while 56 percent of male workers have coverage, only 39 percent of female workers were covered. In addition, the Commission found that only 12 percent of workers with incomes of less than $5,000 were covered, compared with 73 percent of workers with incomes of between $20,000 and $25,000. Thus, females and those with low earnings histories are more likely to retire without employee pension benefits.

Using a different definition of workers, the Employee Benefit Research Institute (EBRI) estimated that 70 percent of nonagricultural civilian wage and salary workers between the ages of 25 and 65 who worked at least half time and who had been with their employer a year or more, were participating in a pension plan.[9] This restrictive definition of work force results in a more optimistic estimate of pension coverage. Increased pension participation means higher rates of pension receipt in the future. If the proportion of retirees receiving an employee pension increases, the proportion of the elderly who are totally dependent on social security or public assistance should decrease.

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[8] President's Commission on Pension Policy: An Interim Report. November 1980. p. 17.

[9] Based on 1979 CPS data.

Nevertheless, there is some evidence that growth in pension coverage has leveled off. Pension coverage is greatest in declining industries, while coverage is lowest in trade and service industries where job growth is projected. As employment shifts from jobs in heavy industries that have high rates of pension coverage, such as manufacturing, toward service industries where firms often are smaller and pension coverage is less widespread (79 percent of workers without pension coverage are employed by firms having fewer than 100 employees), the overall rate of pension coverage is likely to level off or decrease. The result could be a smaller proportion of retirees eligible to receive employee pension benefits.

In 1974, the Employee Retirement Income Security Act (ERISA) mandated minimum vesting[10] requirements for employee pension plans. However, regardless of the rate of growth, some groups of retirees cannot be covered by a pension: Some workers do not remain with any employer long enough to become vested. Workers who frequently change jobs, and workers who enter and leave the work force throughout their careers, are unlikely to accrue significant pension benefits. In addition, low-wage employees are unlikely to accure more than minimum pension benefits.

An October 1982 study on pension coverage and expected retirement benefits prepared for the American Council of Life Insurance (ACLI), highlights a different aspect of the pension situation. The ACLI study used a dynamic microsimulation model to estimate pension benefit receipt. Rather than focusing on the pension status of employees at only one point in time, the ACLI study estimated the probability that a couple or single person would be covered by some sort of pension plan at the time of retirement. The dynamic approach is different from the two other static studies discussed above for three reasons: First, only one partner needed to be covered for a couple to be considered covered by a pension plan. Second, this study measured the likelihood of coverage *by the time of retirement.* With job changing going on during a worker's career, coverage may be obtained at varying points in time. Thus, by figuring coverage at the end of the worker's career, rather than at any single point, the probability of coverage is enhanced. Third, this study included nonemployer financed pension plans, such as IRA's and Keogh's. Their inclusion expands the overall percentage of workers covered by some sort of pension plan. Using this alternative analytic approach, and assuming no increase in the pension coverage rate, approximately 85 percent of all married couples retiring at age 65 in the year 2000 can expect pension benefits from at least one spouse's covered employment. The model predicts that about two-thirds of the single individuals are expected to receive pension benefits.[11]

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[10] Pension plans quite often require that an employee participate in the pension plan for a number of years before eventually becoming entitled to receive the benefits of the plan. For example, Federal civil service requires that an employee be part of the system for 5 years in order to be vested.

(A) INCOME LEVELS OF THE ELDERLY

Wide variations exist in both the percentage of the elderly who receive a type of retirement income and the amount of income a source can provide. Table 2 shows the median income received from different sources by families with a member 65 or older and single individuals 65 or older. Also shown is the percentage of families and individuals receiving income from these sources.

Table 2.—MEDIAN INCOME OF THE ELDERLY BY SOURCE—1981

Source	Median income[1] from that source	Percentage—families[2]	Number of families	Median income[1] from that source	Percentage—individuals	Number of individuals
All sources..	$15,481	99.7	11,137,907	$5,783	99.4	8,086,211
Earnings.....	11,807	49.2	5,500,505	3,839	13.6	1,105,593
SS/RR[3]...	6,222	91.8	10,257,737	4,147	93.0	7,561,186
Employee pensions...	3,660	40.9	4,569,200	2,401	26.3	2,135,446
SSI..........	1,877	7.7	859,419	1,203	10.8	879,628

[1] Median income is compared only for those families or individuals with some income from a particular source.

[2] Income is of the family, not just of the elderly member.

[3] Social security and/or railroad retirement.

Source: March 1982 CPS.

Table 2 shows the median income received from certain sources, but does not show the effects of having different combinations of income sources. For example, most recipients of employee pensions also will receive social security. Tables 3 and 4 look at the effect on median total family income of increasing the number of income sources. For recipients of social security or railroad retirement, a family with only one source of income has a median total income of $6,812; with two sources of income $11,634; and with three sources of income, the total rises to $17,900. The same pattern holds true for families who are recipients of employee pensions. When the pension is the sole source of income, the median total income is $9,600; with two sources, the median total is $11,600; and with three sources, the median total is $17,885.

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[11] It should be pointed out that this forecast is based on a dynamic computer model which makes many assumptions about what will happen over the next 25 years such as work force behavior, demographic trends, and circumstances bearing on future pensions. The study gives recognition to the exploratory nature of this research and points out that the finding could vary under different assumptions. As a result, the authors caution readers to interpret these findings with caution and to review the methodology and assumptions carefully.

Table 3.—TOTAL INCOME OF FAMILY WITH AN ELDERLY MEMBER BY NUMBER OF INCOME SOURCES

Families [1] and single individuals	Number of income sources [2]	Median total income	Number of families [3]
SS/RR recipients	1	$6,812	933,413
	2	11,634	3,554,842
	3	17,900	4,168,564
Employee pension recipients	1	9,600	[4] 21,135
	2	11,600	807,519
	3	17,885	2,443,154

[1] Income of the family, not just of the elderly member.

[2] Interest and dividends are only counted as an income source if they constitute 3 percent or more of total gross income.

[3] For the purposes of this table, unrelated subfamilies are included as separate family units and single individuals are counted as a family of one.

[4] Numbers are estimated of the population and subject to sampling error. Sampling error may be substantial for numbers based on fewer than 100,000 cases.

Source: March 1982 CPS.

This table also shows that families with only one source of income have relatively low incomes with the exception of those with earnings. For families with two or more sources of income, the highest income families are those receiving military pensions, earnings, or Federal civil service retirement.

Table 4 shows the difference between having one source of income and having two or more sources of income. This way of looking at the impact of the number of income sources produces even more dramatic results.

Table 4.—SINGLE INDIVIDUALS AND FAMILIES WITH AT LEAST ONE MEMBER AGE 65 OR OLDER RECEIVING INCOME FROM THE SOURCES LISTED BELOW IN 1981

1981 Income sources [1]	Only one source of income		Two or more sources of income	
	Number of families [2]	Median annual gross income	Number of families	Median annual gross income
Earnings/self employment/farm	307,495	$18,500	6,393,309	$18,512
Social security and/or railroad retirement	2,627,631	4,720	15,191,293	11,886
SSI recipients	133,739	3,030	1,605,308	5,057
Private pension plans	(3)		4,492,067	14,835
Military pensions			312,915	18,746
Federal civil service retirement			842,727	17,527
State and local civil service retirement	11,803	6,169	1,435,224	16,555

Table 4.—SINGLE INDIVIDUALS AND FAMILIES WITH AT LEAST ONE MEMBER AGE 65 OR OLDER RECEIVING INCOME FROM THE SOURCES LISTED BELOW IN 1981—Continued

1981 Income sources [1]	Only one source of income		Two or more sources of income	
	Number of families [2]	Median annual gross income	Number of families	Median annual gross income
Veterans	12,705	4,960	1,032,206	8,970
Interest, dividends, rent, and/or estates	69,905	2,760	9,766,430	13,509
Cash—Other regular recipiency	(3)	(3)	92,665	6,778
Other sources of income	(3)	(3)	1,452,579	15,844
Total	[4] 3,238,406	4,810	16,008,501	12,120

[1] Interest, dividends, rent, and/or estates are only counted as an income source when they constituted 3 percent or more of total income.

[2] For the purposes of this table, single subfamilies are included as separate family units and single individuals are counted as a family of one.

[3] Numbers are estimates of the population and are subject to sampling error. Sampling error may be substantial for numbers based on fewer than 100,000 cases. Numbers too far below this sampling threshold have been suppressed to avoid misinterpretation.

[4] Totals are of families and single individuals with some income. An additional 63,140 families and single individuals reported zero or negative incomes in 1981.

Source: March 1982 Current Population Survey. Table prepared by CRS.

The number of family members who have a source(s) of income also affects the size of the family's total income. Table 5 illustrates that for recipients of different retirement income sources, the number of recipients and/or earners in the family has a strong positive effect on families' total gross income.

Table 5.—TOTAL MEDIAN INCOME OF THE ELDERLY BY SOURCE AND BY NUMBER OF INCOME RECIPIENTS—1981

Source	Family size	Number of recipient/earners [1]	Total median income	Total number of families [2]
SS/RR [3]	1	1	$5,787	7,561,186
	2	1	6,042	321,247
	2	2	13,748	7,551,111
	3	3	24,275	1,090,582
	4 or more	2	13,500	[4]90,612
	4 or more	3	22,912	340,538
	4 or more	4 or more	37,117	560,382
Employee pension	1	1	9,556	2,135,446
	2	1	8,903	94,175
	2	2	16,893	3,591,749
	3	3	27,866	448,998

Table 5.—TOTAL MEDIAN INCOME OF THE ELDERLY BY SOURCE AND BY NUMBER OF INCOME RECIPIENTS—1981—Continued

Source	Family size	Number of recipient/earners[1]	Total median income	Total number of families[2]
	4 or more	3	27,300	87,153
	4 or more	4 or more	39,394	198,588
Earned income	1	1	9,904	1,125,371
	2	1	16,009	112,726
	2	2	18,634	3,129,897
	3	3	27,032	1,009,956
	4 or more	2	18,200	108,571
	4 or more	3	26,170	348,386
	4 or more	4 or more	37,176	606,038
SSI	1	1	3,422	879,628
	2	2	6,714	439,920
	3	3	14,633	140,158
	4 or more	3	15,162	69,329
	4 or more	4 or more	24,642	94,240

[1] An elderly couple with income only from social security or railroad retirement, each of whom is receiving a benefit, is categorized as having two recipient/earners.

[2] For the purpose of this table single subfamilies are included as separate family units and single individuals are counted as a family of one.

[3] Social security and/or railroad retirement.

[4] Numbers are estimates of the population and are subject to sampling error. Sampling error may be substantial for numbers based on fewer than 100,000 cases.

Source: March 1982 CPS.

Tables 3, 4, and 5 confirm that increasing the number of sources of income, measured either by the type of income source or by the number of individual recipients, tends to increase the level of income.

Table 6 shows total income amounts by family size for elderly families. As expected, total family income increases with family size. A high percentage of elderly *individuals* (not families) have low incomes. Forty percent of elderly individuals have incomes below $5,000, and almost 80 percent have incomes of less than $10,000.

Table 7 provides a summary of various income sources available to the elderly. The table shows the number of families with a member 65 or older and single individuals 65 or older receiving income from 11 different sources. The table also provides information on the number of recipients/earners of any two sources of income, e.g., there are a total of 6,700,804 elderly families and individuals receiving earnings. Of those, 5,783,954 families and individuals also received social security and/or railroad retirement.

Age, sex, and race also are strongly related to income levels (see table 8). Elderly blacks have lower incomes than elderly whites, women have lower incomes than men, and those age 75 and over have lower incomes than those 65 to 74. In 1981, whites age 65 and over had median gross incomes of $6,161, while blacks and Hispanics had median incomes of $3,680 and $4,014, respectively. Males and females also differ considerably. The median gross income for a male 65 or older was $8,107, while the median gross income for a female in the same age group was $4,681. When both race/ethnicity and sex are taken into account, some interesting differences become apparent.

Table 6.—DATA ON FAMILIES AND UNRELATED INDIVIDUALS WHO HAD AT LEAST ONE MEMBER OF THEIR FAMILY OVER 64—GROSS INCOME AMOUNTS BY FAMILY CHARACTERISTICS

1981 gross income	One person over 64		Two-person family both over 64		Two- to four-person family at least one member over 64		Five or more person family at least one member over 64		Total all families	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Below $5,000	3,263,544	40	289,031	6	304,859	6	13,172	2	3,870,605	20
$5,000 to $9,999	2,969,303	37	1,400,576	28	933,984	17	60,390	9	5,364,253	28
$10,000 to $14,999	1,006,137	12	1,315,684	26	1,030,075	19	72,979	10	3,424,876	18
$15,000 to $19,999	412,646	5	793,152	16	816,150	15	69,924	10	2,091,872	11
$20,000 to $24,999	181,517	2	391,830	8	608,680	11	67,546	10	1,249,573	6
$25,000 to $29,999	124,741	2	238,593	5	529,463	10	63,782	9	956,579	5
$30,000 to $34,999	51,786	1	169,976	3	336,850	6	64,100	9	622,712	3
$35,000 to $39,999	34,061	....	112,134	2	236,418	4	70,379	10	452,992	2
$40,000 to $44,999	18,372	....	56,558	1	182,679	3	56,230	8	313,840	2
$45,000 to $49,999	14,466	....	54,558	1	119,369	2	37,250	5	225,643	1
$50,000 or more	57,581	1	203,532	4	352,109	6	123,879	18	737,100	4
Total	8,134,154	100	5,025,624	100	5,450,637	100	699,632	100	19,310,046	100

For the purposes of this table unrelated subfamilies are included as separate family units.
For the purposes of this table single individuals would be counted as a family of one.
Table prepared by CRS. Numbers are estimates of the population and are subject to sampling error.
Sampling error may be substantial for numbers based on fewer than 100,000 cases.

Source: March 1982 Current Population Survey (CPS).

Table 7.—DATA ON FAMILIES AND SINGLE INDIVIDUALS WHO HAD AT LEAST ONE MEMBER OF THEIR FAMILY OVER 64 AND WHO RECEIVED INCOME FROM ONE OF THE SOURCES LISTED BELOW

1981 income sources	Earnings self-employed and farm income	Social security and/or railroad retirement	SSI	Private pension plans	Military pensions	Federal civil service retirement	State and local civil service retirement	Veterans	Interest, dividends, rent, or estates	Cash—other regular recipiency	Other sources of income
Earnings, self-employment and farm income	6,700,804										
Social security and/or railroad retirement	5,783,954	17,818,923									
SSI	409,855	1,415,296	1,739,047								
Private pension plans	1,419,225	4,381,765	51,145	4,504,868							
Military pensions	132,289	286,839	11,360	40,304	314,458						
Federal civil service retirement	245,736	693,915	15,896	83,182	42,354	864,970					
State and local civil service retirement	467,410	1,362,487	26,264	183,797	21,962	65,714	1,447,027				
Veterans	347,680	945,778	110,142	114,393	27,447	51,450	42,940	1,044,911			
Interest, dividends, rent, or estates	3,194,620	9,298,392	119,329	2,872,888	177,552	581,919	1,041,242	380,226	9,836,335		
Cash—other regular recipiency	23,494	79,157	5,101	9,095		1,094	3,633	3,479	41,984	102,595	
Other sources of income	101,677	217,917	109,240	29,552	325	406	5,364	23,931	15,753	4,878	284,493

For the purposes of this table unrelated subfamilies are included as separate family units.
For the purposes of this table single individuals are counted as a family of one.
Table prepared by CRS. Numbers are estimates of the population and are subject to sampling error.
Sampling error may be substantial for numbers below 100,000.
Interest/dividend income is only counted as an income source when it constitutes 3 percent or more of total gross income.

Source: March 1982 Current Population Survey (CPS).

Table 8.—INCOME BY RACE AND SEX FOR INDIVIDUALS AGE 65 AND OVER

	Whites		Blacks		Hispanics	
	Male	Female	Male	Female	Male	Female
Median:						
Gross income	$8,643	$4,920	$4,846	$3,367	$5,322	$3,230
Both sexes	$6,163		$3,680		$4,014	

Females are consistently lower than males across all three groups. Although Hispanics as a whole have higher median incomes than blacks, the relationship is reversed for females. Elderly black females had a median gross income in 1981 of $3,367 compared with $3,230 for Hispanic females.

Increased age is clearly associated with lower median gross incomes. For the age group 65 to 74, the median gross income was $6,230. While those age 75 to 84 had a median gross income of $5,400 and those age 85 and older, had a median gross income of only $4,710. income of only $4,710.

Future population changes will affect the development of retirement income policy. The Bureau of the Census projects a future elderly population that is both older and more black. By the year 2000, those age 65 or over will be more than 13 percent black, in contrast to slightly more than 8 percent in 1981. And in the year 2000, almost 50 percent of the elderly will be 75 or older in contrast to 37 percent in 1981.

(B) WORK FORCE PARTICIPATION

Especially in the last decade, work force participation among elderly males has been declining. In 1980, only 19 percent of the males and 8 percent of females age 65 and over were in the labor force.[12] In 1950, 39 percent of the elderly males and 7 percent of the elderly females were in the labor force. The drop in labor force participation is reflected in the proportion of the elderly with some income from earnings.

Approximately 50 percent of families with a member 65 and older and 14 percent of single individuals 65 or older reported income from earnings (table 2). Despite low work force participation rates among the elderly, earnings play a significant role as an income source. In 1981, the median income from earnings was $11,807 for families with a member 65 or older, although in most cases this would not be earnings of the elderly member. Single individuals 65 or older had median earnings of $3,839. Those who have earnings, as well as retirement income, tend to have higher total incomes. For example, in 1978, only 8 percent of those with incomes below $5,000 had earnings, but 47 percent of those with incomes above $15,000 had earnings.

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[12] Employment and Training Report of the President (1981). p. 253.

The Urban Institute's *The Aging of America: A Portrait of the Elderly in 1990* estimates work force participation of the elderly in 1990. This study's low labor force participation scenario assumes no changes in current social security policy and therefore assumes a continuation of recent trends in labor market behavior by the elderly. The projection also assumes more optimistic economic conditions, especially with respect to employment, than have materialized thus far in the 1980's. This inflates the rate of work force participation of the elderly. According to this projection, by 1990 the labor force participation rate for men aged 62 to 64 will be 55.2 percent; for men aged 70 and over, it will be 12.5 percent, a substantial decline from the current level.

However, BLS also projects labor force participation of the elderly. According to the BLS Middle Series Projection, 21.2 percent of males and 11.9 percent of females aged 65 to 69 will be in the labor force in 1990—a 12-percent gain from males and nearly 50 percent for females.

If the decline of work force participation among the elderly continues, it would mean that a growing number of the elderly would be totally dependent on retirement income and savings. This situation would place an additional burden on social security, and other public programs, as well as private sources such as savings, family contributions, and employee pensions.

(C) POVERTY

The elderly often are perceived as economically deprived. The poverty rate among the elderly is higher than among the population as a whole, although this discrepancy has been narrowing. In 1980, 13.1 percent of the population had incomes below the poverty level. For those age 65 and over, 15.6 percent had incomes below the poverty level. Certain groups of elderly have even higher poverty rates. As table 9 shows, demographic characteristics are strongly related to the poverty rates of the elderly. Those age 75 and over are more likely to be in poverty than those age 65 and over (20 percent compared to 16 percent). Elderly women are more likely to be in poverty than elderly men (19 percent compared to 11 percent). Among women age 75 and older, 24 percent have below poverty incomes. Elderly blacks have a higher incidence of poverty than whites, with 38 percent of blacks age 65 and over and 14 percent of whites age 65 and over having incomes below the poverty level. Blacks age 75 and over have a 43 percent rate of poverty.

The data for those very near poverty reveal a similar story. The percentage of the elderly below 125 percent are as follows: 23 percent for whites, 53 percent for blacks, 19 percent for males, and 30 percent for females. Those age 75 and over often have very different income levels from those age 65 to 74. Of the 65 to 74 age group, 21.6 percent fall below 125 percent of the poverty level; in contrast, those age 75 and over have 32.7 percent below 125 percent of poverty.

Table 9.—EFFECTS OF DEMOGRAPHIC CHARACTERISTICS ON POVERTY RATES AMONG THE EDERLY: 1980

[In percent]

	Below poverty level	Below 125 percent of poverty
65 years and older	15.6	25.6
75 years and older	20.1	32.7
Males:		
65 years and older	10.9	19.0
75 years and older	13.9	24.2
Females:		
65 years and older	19.0	30.4
75 years and older	23.7	37.7
Whites:		
65 years and older	13.6	23.0
75 years and older	18.1	30.4
Blacks:		
65 years and older	38.1	53.2
75 years and older	42.6	58.2

Source: March 1981 CPS.

Summary

The elderly are a growing portion of the population. If work force participation of the elderly continues to decline, this portion of the population will be increasingly dependent on retirement income programs.

Income adequacy for the elderly is affected by such factors as age, sex, and race, the number of sources of income and work force participation. As the age, race, and sex mix of the population changes, the income levels and needs of the elderly change. As the median age of the elderly population increases, there is a strong possibility that a higher proportion of the elderly will have inadequate incomes. Those age 65 and over are less likely to have income from earnings. In addition, if the recent decline in work force participation of the elderly continues, an increasingly smaller percentage of the elderly will have income from earnings.

On the other hand, if employee pension plan participation increases, more people will reach retirement with an additional income source and thus higher total income. If realized, increased levels of pension coverage could work to counteract some of the effects of demographic factors and decreasing work force participation on income of the elderly.

One clear message from the various statistics discussed above is that the elderly with multiple sources of income are more likely to enjoy retirement years without having to diminish their standard of living.

Appendix B

Work-Related Entitlement Programs: Demographic Context

by

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Senior Specialists Division

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WORK-RELATED ENTITLEMENT PROGRAMS: DEMOGRAPHIC CONTEXT

Demographic trends are determinants of the size and composition of the population ultimately entitled to work-related retirement and disability benefits. Hence, they are important to an examination of the necessity, adequacy, advantages, and potential problems of present support arrangements. This paper outlines the demographic context in which work-related entitlement programs exist. First, it discusses the main elements in the aging of the U.S. population, with special attention to the increase in the number of work-related entitlement recipients and to changes in age-related and economic dependency ratios. Second, it examines three major components of population change—fertility, mortality, and immigration. Finally, it discusses recent U.S. population projections and their implications for the future old-age dependency burden in the United States.

Introduction

Apart from program changes, demographic shifts are the major determinants of the size and cost of such work-related entitlement programs as social security, medicare, and the civil service, railroad, and military retirement programs. Other important factors include economic conditions and behavioral changes, both of which are inextricably bound together with demographic patterns. Demographic research examines vital and social statistics: births, deaths, diseases, marital status, and migration patterns of populations. These numbers are deceptively simple statistical indicators and mask more complex human behavior, which demographers strive to understand, interpret, and use for projections. Fertility and mortality trends shape the size and composition of the U.S. population. Complemented by net immigration, changes in birth rates and life expectancy influence how many people will be eligible for the work-related entitlement programs and for how long. An examination of population trends can alert policymakers to the demographic changes that are most likely to occur and enable them to plan for these changes in advance.

Of prime concern today is the progressive aging of the U.S. population or the graying of America. Changes in the number of births have significantly altered the age distribution of the U.S. population. Social security and other work-related entitlement programs have operated in the past with a pyramid-shaped population structure, with older persons constituting a smaller group atop a larger base of younger and working persons. However, the post-World War II increase in the birth rates that extended through the

1950's, coupled with the more recent precipitous decline in fertility, has changed that pyramid-like shape of the U.S. population.

Public provision for old-age dependency is a relatively recent arrangement, explained by the changing character of our social and economic institutions and the concomitant changes in the population. The development of the industrial system and the shrinking proportion of farmers changed the economic functioning of families and gradually eroded the system by which families supported their aged. Increases in life expectancy meant not only longer work lives but more aged in need of support. Collective and governmental provision for support of the aged became desirable, and this century has witnessed increased reliance upon institutional provision for nonworking, older persons. The New York City police force had a retirement system as early as 1857, and teacher retirement funds were started before the turn of the century. The first private sector pension plan was founded in 1875 for the employees of the American Express Company. By 1900, there were only about a dozen private plans, but the next two decades saw greater growth. Originally linked to disability and wartime service, retirement provisions for the military reach back to 1636, when the Plymouth Colony maintained for life any man maimed while acting as a soldier. The civil service retirement system was established in 1920. In 1935, the Social Security Act embarked upon the task of providing for employees of commerce and industry. And more recently, the Employee Retirement Income Security Act of 1974 (ERISA) was enacted to insure the equitable character and financial soundness of private pension plans.

Problems associated with financing the social security system until the 1990's are not demographic, but arise from such economic considerations as price increases exceeding the growth in wages and higher-than-expected unemployment. For the 20 years after 1990, demographic trends will have a comparatively favorable effect on the system. There is a slowing of the increase in the older population because the smaller birth cohorts from the Depression pass into retirement, while the large baby boom generation is of working age and contributing to the system. After 2010, however, a dramatic increase in the older population is anticipated when the large birth cohorts of the late 1940's, 1950's, and early 1960's mature beyond age 65. This increase is a cause of concern because the older age group is an economically dependent population supported largely by intergenerational transfers that in past centuries were made by the immediate family but now are predominantly public. Changes in demographic trends are important to the civil service, railroad, and military retirement programs because increasing life expectancy means that people spend more years in retirement.

The Aging of the U.S. Population

At the time of the first census in 1790, the U.S. population totaled 3.9 million persons. By 1900, the population had grown to 76 million; in 1945 it reached 140 million, and it stands at about 231 million in 1982. Although seeming to increase steadily, these totals mask pronounced fluctuations in the rate of change. Prior to World War I, most annual population growth rates exceeded 1.5 percent and generally were closer to 2 percent. Immigration acts passed in the early 1920's and the subsequent effects of the Great Depression pushed growth rates to the lowest levels ever recorded. Then, with the ending of World War II, growth rates rose once again and were consistently above 1.5 percent between 1946 and 1962. The late 1950's, however, saw the beginning of another steep decline. The annual growth rate fell from 1.81 percent in 1956–57 to 0.74 percent in 1975–76, a drop of almost 60 percent in fewer than two decades. Variations in the rate of childbearing have been the major cause of changes in the population growth rate.

Fluctuations in the total fertility rate (the average number of lifetime births per woman) mirror those in the growth rate. In the first quarter of this century, the total fertility rate ranged between 3.0 and 3.6 (see figure 1). During the Depression, it fell briefly below replacement level and was near 2.2 throughout most of the 1930's. Then fertility rates experienced an upswing to a postwar maximum of nearly 3.8 in the late 1950's, followed by another sharp downturn to 1.74 in 1976.

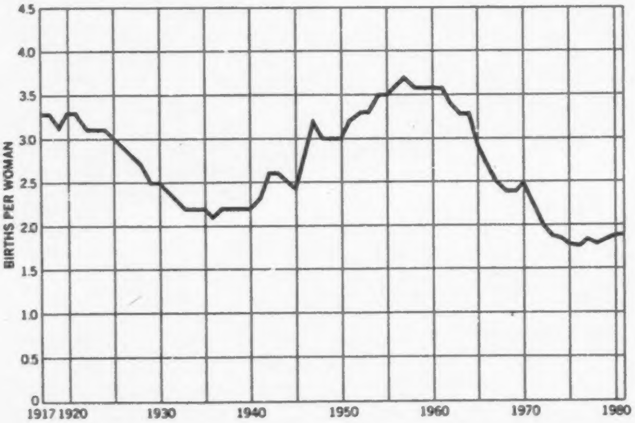

FIGURE 1. Period Total Fertility Rate for U.S. Females: 1917–1980.

Source: Population Reference Bureau, U.S. Population: Where We Are; Where We're Going. Population Bulletin, Vol. 37, No. 2, June 1982.

There has been less fluctuation in mortality and net immigration, both of which contribute to population gain or loss. This century has seen consistent improvement in survival rates. Male life expectancy at birth has increased from 46.3 years to 69.1 years between 1900 and 1976. In the same period, female life expectancy rose from 48.3 to 77.0 years. With the exception of the Depression years, from the early 1920's until recently, the annual number of legal immigrants to the United States has averaged between 300,000 and 400,000. With the influx of refugees in the past few years, those numbers have increased to between 700,000 and 800,000 for 1980 and 1981.

The consequence of these fluctuations in population growth rates is a changing age structure. Figure 2 reveals the changes the U.S. population has undergone since the turn of the century. The large cohorts born after World War II, their impact having been heightened by the low fertility of the 1930's and of the last 15 years, progress through the age structure of the population affecting such age-relevant experiences and institutions as school, college, job market, career advancement, and retirement. Some have likened this progression to the visual imagery of a boa constrictor swallowing a pig.

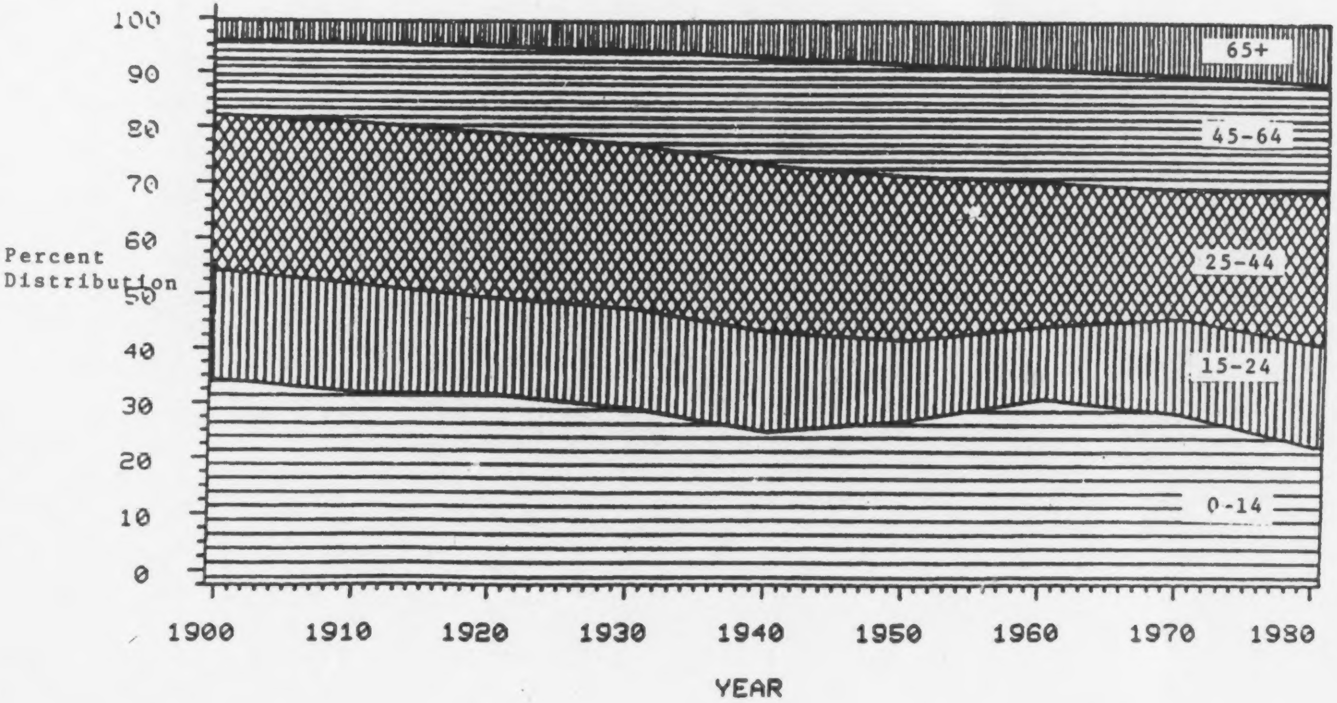

FIGURE 2. Age Structure of the U.S. Population in Selected Age Groups: 1900-1980

Source: U.S. Commission on Population Growth and the American Future; U.S. Bureau of the Census.

Population aging is usually signaled by an increase in the relative number of older persons—those above age 60 or 65—or by a rise in the median age, the age at which half the people are younger and half are older. In 1900, 4.1 percent of the population were 65 years and over; in 1980, 11.3 percent were. The median age, in turn, rose from 23 years in 1900 to 30 years in 1980. After 2010, the proportion of older persons in the population will rise steadily as the baby boom generation reaches retirement age. This proportion is expected to peak around the year 2030 when those born between 1955 and 1964 will be age 65 to 74. Persons 65 years and older will number some 59 million and comprise about 19 percent of the U.S. population in 2025, compared to today's 26 million elderly representing 11 percent.

There exists within this older age group a growing subgroup of persons over 75 years, 4.4 percent of the population in 1980. The increase of about one-half a percentage point each decade since 1950 in this age group's share of total population is expected to continue through the year 2000, then level off as the small birth cohorts from the Depression reach age 75. A sharp rise in the percentage of those over 75 to 7.7 percent is likely as the baby boom generation ages. Expressed as ratios, these increases mean that in 1950 about 1 in every 40 persons was over 75; the ratio is now 1 in every 23; and after 2030 it is expected to be 1 in 11. The proportion of persons over age 85 is also on the increase; 1 in 250 in 1950, now 1 in 100, and projected to be 1 in 50 by the year 2030.

The aging of the U.S. population together with the growing proportion of older persons seems likely to continue, at least through the early 21st century. However, the impact of these trends is less well-known. The flexibility of our society and economy will be challenged to resolve emerging conflicts between workers and retirees as both groups strive to fulfill their expectations for an adequate standard of living. Although future fertility will probably dominate the course of population aging, changes in mortality and immigration also are significant. Predicting the course of these three components of population change is especially difficult since population trends do not function in a vacuum but are influenced by economic and social changes.

Dependency

Demographic changes also have implications for the relative importance of economic dependents in the population. Economic dependents are those who have not yet entered the labor force, those of working age not employed (whether through choice or circumstance, including disability), and those who have retired from the labor force. Most often, society's economic burden is thought of in terms of the young and the aged. Support is both public and private, and the respective proportions for young and aged differ with social changes. At present, expenditures on the young are predominantly private and familial, complemented by public ones for education. Support for aged persons retired from the labor force, and their dependents, increasingly has been provided collectively through pensions and social security. An aging baby boom generation suggests the need to examine the changing balance between the number of retired dependents and those who support them.

Dependency ratios can be defined in terms either of age groups or of the relative number of workers and nonworkers. Data on the former (that is, demographic dependency) are sometimes easier to locate, but even demographic dependency ratios can be misleading, as higher education extends the length of dependency and affects historical comparisons with periods when people began work at earlier ages. The relative number of persons age 65 and over to those of work age (18–64) more than doubled between 1920 and 1960. In addition, as the social security program (old-age, survivors, and disability insurance) has matured and more workers have become recipients, the ratio of covered workers (contributors) to beneficiaries has decreased from 8.6 to 1 in 1955 to 3.2 to 1 in 1982, and it is projected to fall to 2 to 1 by 2030.

A more comprehensive picture of economic dependency is formed by including youthful dependents along with the elderly. The total dependency ratio (the sum of the young plus aged divided by the number of persons of working age) will change less dramatically than the old-age dependency ratio after the turn of the 21st century. Projections for the year 2030 indicate there will probably be 73.8 dependent people for every 100 workers. That figure is above the level of 64.2 for 1980 but below the ratio of 81.9 of 1960, when children under 18 comprised 36 percent of the population.

An important question is whether children exert the same claims on resources as the elderly. Within the total dependency ratio, the numbers of young and aged dependents may be interchangeable, but whether expenditures on them are also equal remains unclear. It is likely, however, that expenditures differ in source, nature, and amount. Expenditures on children are generally provided by the family or by State and local governments, whereas expenditures on adults include self- and employer-financed pensions and Federal work-related entitlement programs. As the proportion of older dependents increases, family resources can either be reallocated from the young to older dependents as direct private transfers or be funneled to those same older dependents indirectly through such public transfers as social security. Either option requires a choice to shift resources from the young to the elderly instead of intensifying expenditures on children. An example of the latter is that when the baby boom generation reached school age, the increasing number of students saw a rapidly rising standard of education, and the amount expended per student rose steadily in real terms.[1] Expenditures on children are thought of as creating human capital, influencing future earnings and productivity, while those on older adults are more in the nature of maintenance. Thus, society may be more willing to invest in its younger members at the expense of its elders.

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[1] Russell, Louise B. The Baby Boom Generation and the Economy. The Brookings Institution, Washington, D.C., 1982. p. 46.

Research on the relative costs of children versus the elderly remains limited. Hilde Wander, a German economist, reports:

> It is seldom realized that a child absorbs more resources than an old person, on the average. At current mortality and current standards of consumption, educational performance, and social security in the Federal Republic of Germany, it costs society about one-fourth to one-third more to bring up an average child from birth to the age of 20 than to support an average person of 60 years over the rest of his or her life. This estimate is based on national accounts statistics of the Federal Republic of Germany of 1973 and refers to final private and public consumption expenditure as well as to fixed capital formation for internal use.[2]

On the other hand, Robert Clark and Joseph Spenglér estimate that, in the United States, the per capita public cost of financing transfers to the aged is almost three times greater than is such financing for children.[3] These two estimates are not necessarily comparable; different countries are being considered, and the Federal Republic of Germany estimate includes both public and private expenditures, while the U.S. estimate emphasizes public transfers.

Another measure of dependency that can indicate the type of financial pressure that individual families face comes with comparison of birth cohorts of different generations. An examination of the relative numbers of persons aged 65 to 79 and persons 45 to 49 indicates a familial dependency ratio, a ratio of elderly parents to adult children who are potential supporters. The larger postwar families mean that there are potentially more children to support elderly parents and more siblings among whom to divide any needed economic and psychological support. On the other hand, children born today may face special difficulties in providing for their parents because contemporary birth cohorts are relatively small. By this reasoning, parents born during the Depression are negatively affected in two ways. They have large numbers of children to support and their parents are living longer because of important reductions in mortality at older ages. In 1976, there were 156 persons aged 65 to 79 per 100 persons aged 45 to 49. That ratio rose to 180 to 100 in 1980 and, after slight decline, will reach 250 to 100 by 2025. Whatever the numerical ratio, actual support also depends upon the parent-child relationship. Will personal, private responsibility grow commensurately with need, or will collective and more detached intergenerational transfers be more appealing? At present, less than 5 percent of the aggregate income of older persons comes from direct transfers by children. Also, as life expectancy increases, multiple generation dependency is a possiblity. Persons age 80 to 85 years could have children who themselves are entering the older dependent age group, and the support burden may need to shift down a generation.

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[2] Wander, Hilde. Zero Population Growth Now: The Lessons From Europe. *In* Thomas J. Espenshade and William J. Serow (eds.), The Economic Consequences of Slowing Population Growth. Academic Press, New York, 1978. pp. 57-58.

[3] Clark, Robert L. and Joseph J. Spengler. Changing Demography and Dependency Costs: The Implications of Future Dependency Ratios and Their Composition. *In* Barbara R. Herzog (ed.), Income and Aging. Human Sciences Press, New York, 1978. p. 55.

The nature of the American family is also in a state of change. Families are becoming smaller, and family structures are developing into more varied and more complex patterns. These changes could work either to ameliorate or exacerbate the status of private intergenerational transfers and public work-related entitlement programs. While about 74 percent of the U.S. population lived in a family headed by a married couple in 1980, one of every five children lived in a one-parent family. The proportion of children in single-parent families nearly doubled between 1970 and 1981. There has also been a pronounced increase in divorce and in births out of wedlock. The number of divorced persons per 100 married persons living with a spouse grew from 3.5 in 1960 to 4.7 in 1970, and by 1981, it had reached 10.9. Increasingly, children residing with two parents are doing so within reconstituted families, with step-parents. Relationships between parent and child, and especially feelings of responsibility for each other's economic well-being cannot remain unaffected. How responsible can an adult feel for the support of an elderly parent in whose care a few years were spent or with whom there is no blood tie? Under these circumstances, the attractiveness of public social insurance increases.

The proportion of people 35 to 54 years old currently divorced nearly doubled between 1970 and 1980. Divorce usually entails a decline in standard of living, at least for women with dependent children, possibly leaving fewer resources available for support of dependent parents. The proportion of noninstitutionalized persons over age 65 living alone increased from 19 percent in 1960 to over 30 percent in 1980. As divorce increases, this proportion can be expected to rise even higher. Approximately 45 percent of women over 65 were living alone in 1980. The percentage is lower for men, 15.5 percent, because divorced and widowed males are more likely to remarry. Poverty among the elderly is greater among women; among those 65 years and over, women are twice as likely to fall below the poverty level as men are. Weakening of the extended family has implications for health care, too. Only about 5 percent of the population over 65 reside in nursing homes at any given time, and some 80 percent of home health care for older people is provided by their families. As family structures change and female labor force participation increases, there may be a reduction in home services or in-kind transfers that blood relatives and other family members can provide. The absence of working-age women from the home may make it difficult for families to care for elderly parents. Moreover, rising family income of two-earner families may make nursing homes more affordable.

Fertility

Of the three major determinants of population growth (births, deaths, and net immigration) fertility behavior has the greatest impact on population composition. The actual number of births is determined by the number of females at childbearing ages and the rates at which these women have children. Fertility measures can be expressed as crude birth rates, that is, as the number of births per 1,000 population, or as a period total fertility rate, an expression for the average number of children a woman would have if she bore children throughout her childbearing years at the same rate observed among women at successive ages in a given year.

In 1900, the crude birth rate was 29.8 and the total fertility rate was 3.6 births per woman. Thereafter began a gradual decline in the birth rate but, with the exception of a brief period during the Great Depression, fertility remained above replacement level until 1972. Since then, fertility has stayed below replacement, fluctuating around a total fertility rate of 1.8.[4] The number of births and the birth rate increased in the early 1940's, and in 1947 the total fertility rate was 3.2. The period known as the baby boom followed, and in 1957 the total fertility rate peaked at 3.8. Between 1955 and 1964 more than 4 million births were recorded annually (the averge from 1909 to 1945 had been 2.7 million). After the boom years, the total fertility rate underwent another drop and fell to an all-time low of 1.7 in 1976. In the past few years the total fertility rate has increased slightly to just under 1.9 in 1981. But despite an increase in the number of women of childbearing age to nearly 52 million in 1981 (compared to 36 million in 1960), annual births in 1981 were only 3.6 million versus 4.3 million in 1960.

Future fertility behavior is of primary interest. Scholars have identified the following factors, among others, as important determinants of fertility patterns: proportion of women remaining single, age at first marriage, interval between marriage and first and succeeding births, improved contraceptive technology, length of marriage, prevalence of divorce. For example, women in their early twenties are increasingly postponing marriage; 28 percent of women 20-24 years of age had never married in 1960, while over 50 percent remained single in 1980. Over this period, the median age at first marriage for women rose from 20.3 to 22.1. Trends in these variables in turn are related to such other factors as economic prosperity and female labor force participation.

Demographers are divided in their views over the future course of fertility in the United States; some foresee an upswing in fertility, whereas others look for a continued trend toward smaller families. There has been a rise in the annual *number* of births, but this increase is due primarily to the increased *number* of baby boom females in the childbearing years rather than to a rise in the number of births per woman. Fertility has remained relatively low, so what we have witnessed thus far is a baby boomlet or a faint echo of the baby boom (fainter than anticipated in the 1970's).

Economist Richard Easterlin suggests that postwar adults—a small cohort born in the 1930's—had large families because their high wages and high standard of living far outstripped expectations. Their children, the baby boom generation, on the other hand, upon entering a more highly competitive labor market with expectations based upon parental prosperity, are choosing to postpone childbearing and reduce family size. Easterlin forecasts another increase in fertility rates in the 1980's as the smaller cohorts born during the baby bust of the 1960's enter the childbearing years.[5]

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[4] Replacement level is the value of the total fertility rate which, if sustained with no emigration, immigration or change in mortality, would ultimately cause the population to reach and maintain a constant size. Its current value is approximately 2.1.

Alternatively, sociologist Charles Westoff argues that there is no turning back from the social changes in marriage, educational attainment, improved contraception, and increased labor force participation and economic opportunity among women. He feels that fertility may not continue to decline but will remain low as marriage and childbearing become less of an automatic social response for women.[6]

William Butz and Michael Ward analyze the microeconomic determinants of fertility and conclude that just as the baby boom was a response to rising male income, the baby bust of the late 1960's was a reaction to increases in female wages and income. They see future fertility moving countercyclically. Fertility is low when what women sacrifice for childbearing and rearing is high, and vice versa. Thus, when large factions of women are engaged in paid work and their wage rates are high, fertility rates should be low. On the other hand, periods of high unemployment should correlate with increases in fertility.[7]

Joan Crowley and David Shapiro report that the National Longitudinal Survey of Youth, 1979, indicates a reduction in fertility expectations among the responding youths aged 14 to 22 years. The young women in their sample displayed low fertility expectations consistent with their high educational expectations and employment aspirations. Crowley and Shapiro suspect there will be further downward revisions in fertility expectations on the part of young women who achieve high levels of schooling and attractive positions in the labor market.[8]

Mortality

Trends in mortality are also important determinants of population composition. In addition to how many children are born in a particular year, how many of them survive to different ages helps to determine the age distribution of a population. In general, mortality improvements that are concentrated at the younger ages have the effect of creating a younger population, whereas declines in death rates at older ages tend to make the population's age distribution older. In this century, we have experienced a decline in infant mortality and a decline in mortality among the young. More recently, the greatest improvement has been at the end of the life span, raising life expectancy in the older ages and increasing the population beyond age 65 and even age 85. Mortality can be discussed in terms of life expectancy at selected ages, that is, the additional years a person can expect to live beyond a particular age. Thus, one has a different expectation of life at birth than at age 20 or at age 55. Expectation of life for an infant in 1978 was 73 years, but 19.7 years for someone at age 60. Thus, one's total life expectancy increases the longer one survives.

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[5] Easterlin, Richard A. Birth and Fortune: The Impact of Numbers on Personal Welfare. Basic Books, New York, 1980.

[6] Westoff, Charles F. Marriage and Fertility in the Developed Countries. Scientific American, vol. 239, December 1978. pp. 51–57.

[7] Butz, William P., and Michael P. Ward. The Emergence of Countercyclical U.S. Fertility. The American Economic Review, vol. 69, June 1979. pp. 318–328.

[8] Crowley, Joan E. and David Shapiro. Aspirations and Expectations of Youth in the United States. Youth and Society, vol. 13, June 1982. pp. 391–422.

From classical antiquity until fairly recently, improvements in life expectancy were concentrated under age 40. In developed countries, persons surviving the first weeks of life could be expected to live 40 or 50 years. By 1950, mortality levels in the United States had decreased to such an extent that there was little room for improvement below age 40. Then, contrary to historical experience, death rates past age 40 began to decline and to decline at an accelerating rate. In 1950, heart disease and related vascular disease caused about one-half of all deaths. Another one-sixth were attributable to cancer and related diseases. Most of these deaths were among those past age 40, as fewer at the younger ages were dying from any cause. The next most common causes of death were violence-related. For the entire population, cardiovascular and neoplastic diseases were more common causes of death than all others combined. Between 1960 and 1977, deaths from cardiovascular diseases dropped from 515 to 444 per thousand deaths and deaths from hypertensive heart disease dropped from 37 to 4.8. In the same period, cerebrovascular disease deaths dropped from 108 to 84, arteriosclerosis deaths from 20 to 13.3, and deaths from active rheumatic fever and chronic rheumatic heart disease from 10.3 to 5.9 per thousand deaths. The statistics are impressive. Although these declines in various causes of death can be enumerated, the reasons for the decline are not yet completely clear. Commentators point to several trends but their relative importance is not entirely known. There have been surgical advances, advances in antibiotic effectiveness and administration, decreases in mortality from influenza and pneumonia, and better control of hypertension. The use of police to rush heart attack victims to hospitals and lowering of the speed limit have contributed. Society has experienced economic prosperity, changes in lifestyle, consciousness about health care, and increased attention to diet, exercise, and the harmful effects of smoking.

There are two avenues to increases in life expectancy. One is to eliminate disease or events that prevent a person from living a life span; the other is the possibility of extending the life span itself. Although there have been significant changes in birth rate and death rate over the centuries, the highest age at death has remained approximately 110 years. And despite significant changes in average life expectancy, a natural limit to the life span or a mean age at death appears to be around 85 years. Technological progress in further reducing mortality at early- and middle-old age is not unlikely in the short term. Work in the area of the causes of aging and means of moderating the process is being conducted at a basic level.

Improvements in life expectancy are made not only at different points in the age spectrum, but also at differing rates for sex and race groups. Since the late 1800's, U.S. females, particularly white females, have had a longer life expectancy than males, and the gap between male and female life expectancy has increased with the decline in mortality. Lois Verbrugge, however, points out that for the period 1970-77, the pace of improvement of female mortality relative to male mortality slowed down.[9] Trends over the century are summarized in figure 3. In 1900, white female life expectancy at birth exceeded that of white males by 2.1 years; nonwhite female life expectancy was 1 year greater than that of a nonwhite male. By 1940, the gap had widened so life expectancy at birth for white and nonwhite females exceeded that of white and nonwhite males by 4.5 and 3.4 years, respectively. In 1979, sex differences were 7.6 years for whites and 8.7 years for nonwhites. Life expectancy was 70.6 years for white males, 78.2 for white females, 65.5 for nonwhite males, and 74.2 for nonwhite females. In 1965, nonwhite female expectation of life matched that of white males, and now exceeds it by 3.6 years. Because of the longer life expectancy of women, the elderly are mostly women, and women over age 65 now outnumber men by 50 percent.

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[9] Verbrugge, Lois M. Recent Trends in Sex Mortality Differentials in the United States. Women and Health, vol. 5, Fall 1980. pp. 17-37.

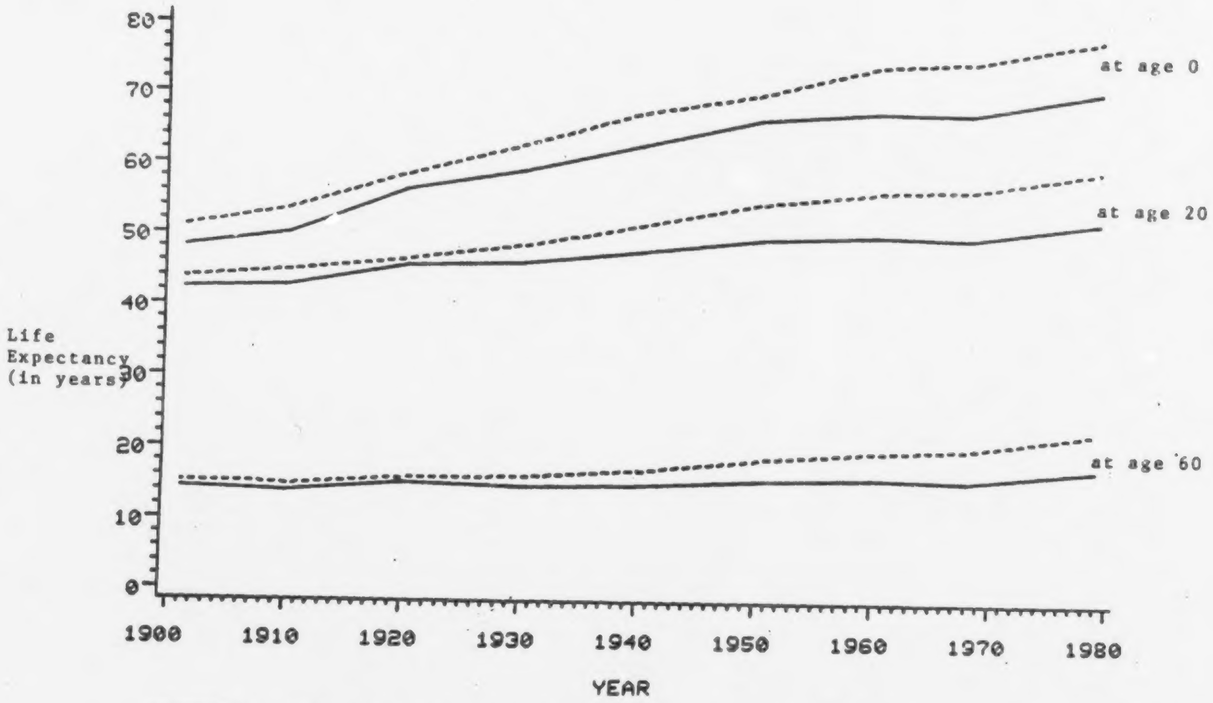

FIGURE 3. Life Expectancy at Selected Ages for White U.S. Males and Females: 1900-1980

Life expectancy at each age indicates average number of years remaining to be lived for persons at that age.

Source: U.S. Commission on Population Growth and the American Future; National Center for Health Statistics.

Immigration

The third determinant of U.S. population structure is net immigration (immigration minus emigration). The measurement of the demographic impact of immigration on U.S. population can be expressed either in annual levels or as a percentage of population growth. Legal immigration was greatest between 1880 and 1920. Over 1 million immigrants entered the United States in the years 1905, 1906, 1907, 1910, 1913, and 1914. About 400,000 legal immigrants entered each year of the 1970's. The arrival of Indochinese refugees and Cuban and Haitian "entrants" caused the yearly figure to jump to 800,000 in 1980 and 700,000 in 1981. The exact extent of illegal immigration is unknown. Estimates for recent years range from 100,000 to 500,000 and more; the total number of people residing illegally in the United States is estimated to be from 3 to 6 million.[10]

At various points in U.S. history, net legal immigration has accounted for a significant proportion of overall annual population growth. In the periods 1880-89 and 1900-09, for example, 40 percent of population growth was attributable to net legal immigration. In the 1970's, net immigration contributed 20 percent of population growth, and in 1980, with the high refugee admission, the proportion increased to one-third. If current below-replacement fertility continues, immigration is likely to account for increasing proportions of population growth in the future.

The effect of net immigration on the age distribution of the U.S. population depends on two factors: (1) the difference between immigrant and native fertility and mortality behavior, and (2) the discrepancy between the age structure of the immigrants and the resident population. Transnational migrants are often relatively young heads of families and have the effect of lowering the average age of populations in receiving countries. For a program such as social security, relatively young immigrants expand the payroll tax base more rapidly than the beneficiary population. However, a substantial volume of immigration would be required to lessen the pressures anticipated for the social security system between 2010 and 2030, because the U.S. fertility rate has a more powerful impact on age composition. For example, Leon Bouvier calculates that, assuming continued low fertility of 1.8 births per woman, 54.8 percent of the U.S. population would be in the 20-64 age group in 2030 with *no* immigrants. This figure would increase to only 56.8 percent with a net annual influx of 1 million immigrants.[11] The smaller birth cohorts following the baby boom generation are anticipated to tighten the labor market and increase the growth of real wages. These conditions could increase the desirability of high immigration levels, serve to attract even more women into the labor force, and raise the incentive to postpone retirement.

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[10] Siegel, Jacob, et al. Preliminary Review of Existing Studies of the Number of Illegal Residents in the United States. Unpublished paper prepared for the Select Commission on Immigration and Refugee Policy, 1980.

[11] Bouvier, Leon F. Immigration and Its Impact on U.S. Society. Washington, D.C. Population Reference Bureau, 1981. p. 10.

Trends Affecting the Characteristics of Recipients of Work-Related Entitlements

Trends in fertility, mortality, and international migration affect the relative numbers of people at successive ages in the population. Trends in labor force participation rates are markers of the extent to which those of labor force age are actually in the labor force. Rising labor force participation rates may expand the working population faster than the number of recipients of work-related entitlements. Increasing female labor force participation indicates that more women are contributing to work-related entitlement programs and possibly will be receiving benefits more frequently as earners rather than as spouses. The trend among older male workers toward early retirement may slow as the educational achievement of the work force increases and economic conditions encourage a longer work life.

In 1948, women comprised 27.9 percent of the labor force and 42 percent in 1981. Half of working-age American women are now in the labor force, and by 1990 the proportion is expected to be at least 61 percent. More women are entering the labor force for short periods of time, whereas other women are entering and remaining longer, thereby establishing a more continuous work history. Since most of the increase in labor force participation has occurred among married women, the impact on the size of the social security benefit population is minimal because almost all married elderly women qualify for secondary spousal benefits. In the short run, there is an expansionary effect on the system's payroll tax base. The benefits paid out remain much the same because the spousal benefit often exceeds that based upon the woman's work history due to the significant difference which remains between earnings of men and women coupled with the interrupted labor market patterns of women. The long-term implications are less certain. Current trends point to possible change in intermittent female labor force participation,[12] yet the earnings differential still persists in lowering the probability of earning a primary benefit that exceeds the secondary spousal benefit.

Young women today are more likely to have a job, marry later, have smaller families (or no children), and continue working outside the home after childbearing. Women aged 25 to 34 increased their labor force participation rate from 42.6 percent in 1968 to 62.2 percent in 1978 and to 66.7 percent in 1981. Projections for this group indicate a possible 80.7 percent rate by 1990. As more women earn and receive higher primary worker benefits, fewer secondary spousal benefits will be paid out, perhaps thereby easing some of the pressure on social security. On the other hand, women on average live longer than men so their social security benefits are paid for a longer period, yet payroll tax is the same for both sexes. Private pensions are becoming sensitive to the sex mortality differential as more women in the work force on a long-term basis qualify for retirement benefits on their own earnings, and pension funds may have inadequate resources. Payments into pension funds cannot differ on the basis of sex. Whether lower female annuity payments using sex-based actuarial tables are permissible is under consideration by the U.S. Supreme Court.

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[12] Masnick, George, and Mary Jo Bane. The Nation's Families: 1960-90. Auburn House, Boston, Mass., 1980. pp. 65-73.

In contrast to female behavior, since the beginning of the century, there has been a decline in male labor force participation, especially a trend toward early retirement. Fewer older males have remained in the work force. Whereas at the turn of the century two out of every three men aged 65 years and older were at work, the proportion was 47.8 percent in 1947, 27.9 percent in 1965, and 18.4 percent in 1981. Labor force participation rates among men ages 60 to 64 years also have declined. In 1955, 82.5 percent of males aged 60–64 were in the labor force, but in 1981 the figure was 60.8 percent (for the 5-year period 1970–75 the drop was from 75.0 percent to 65.7 percent). Pension plans and social security lack incentives to postpone retirement; later retirement can even mean reduced wealth under present arrangements.

Male labor force participation among the 55–64 age group (the early retirement years) increases with years of school completed. Withdrawal from the labor force in the 55–64 age group is most common among men with 8 or less years of elementary school and least affects those with 4 years of high school or more. As the present older workers retire, the educational achievement of the labor force will increase. In 1940, nearly 89 percent of those over age 60 had never attended high school. Today the figure is less than 40 percent, and after the year 2000 the percentage is projected to decline to less than 10 percent. Those elderly with some college education comprised 6 percent of all elderly in 1940, 18 percent in 1980, and will be nearly 50 percent by early in the next century. These increases can be expected to continue as long as the educational attainment of successive cohorts rises.

The trend toward early retirement among males results in a shrinking social security payroll tax base and a lower ratio of contributors to beneficiaries. Nevertheless, other factors may inhibit the trend toward early retirement. These include inflation undercutting retirement income, economic uncertainty, and legislation prohibiting age discrimination in employment. In the more immediate future, the maturing baby boom generation may create demand for openings in career advancement and press for early retirement of those in their parents' generation. But soon thereafter, slowing population growth is likely to mean a shrinking pool of available manpower, and the baby boom generation's increased educational attainment, linked with longer work life, could slow down rates of early retirement. All these conflicting trends make forecasting difficult. Choices in work and leisure and expectations of quality of life pre- and postretirement are interrelated. Those who can afford education and health care are more likely to experience continuous employment, high income, adequate pensions, skill acquisition, and expanded choices in work and retirement decisions. As the 55 and older age groups become more highly educated, they can be expected to become more competitive and remain in the work force longer absent increased incentives to do otherwise.

Although discussion of health care and the elderly is beyond the scope of this piece, a few points can be included for our profile of the older populations. A 9.4-percent share of the gross national product was taken up by health care expenditures in 1980. Through medicare and medicaid, the elderly population group uses a large proportion of these resources. Hospital usage and institutional care appear more related to age than physician visits. In examining the effects of age structure on medical care, Louise Russell reports that if patterns of hospital use by older people and financing arrangements remain unchanged, the medicare program will be paying an increased percentage of the Nation's total hospital bill.[13] Also, there exist varying proportions of population over age 60 among the States, ranging from Florida's 23.1 percent to Alaska's 4.9 percent. Thus, different areas of the country face varying demands for medical services as retired persons migrate to attractive climes and as areas of economic hardship or slow economic growth are more readily abandoned by younger groups seeking greater economic opportunity and leaving older persons behind to compose a higher proportion of residents.

Prospects for the Future

Both the U.S. Bureau of the Census and the Social Security Administration produce series of population projections. The two agencies work separately but in consultation with each other on choice of assumptions. Usually, the two sets of projections differ, in part because each uses a differently defined population base, and in part because of different underlying assumptions.

The Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds presents projections of the future income and outgo of the OASDI system on the basis of four sets of long-range assumptions, designated as alternatives I, II–A, II–B, and III. The alternatives differ in terms of economic and demographic assumptions. The 1982 annual report of the Board employs three sets of demographic assumptions. Alternatives II–A and II–B assume an ultimate total fertility rate of 2.1, attained in 2005 and sustained through 2050. Mortality rates are assumed to decrease gradually during the entire 75-year projected period, with an average reduction from 1978 levels of 37 percent by the year 2060, that is, a life expectancy at birth in 2060 of 75.4 years for men and 84.1 years for women. An ultimate total fertility rate of 2.4 is assumed in alternative I (the optimistic scenario), and the average annual reduction in mortality rates is half of that used in alternatives II–A and II–B. In alternative III (the pessimistic scenario), a lower ultimate total fertility rate of 1.7 is used; the average annual reduction in mortality rates is twice that used in alternatives II–A and II–B. For all alternatives, an annual net immigration of 400,000 is assumed.

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[13] Russell, The Baby Boom Generation and the Economy, p. 140.

The U.S. Bureau of the Census issued three new series of population projections in October 1982, revising for the first time the projections it published in July 1977. The new middle series assumes an ultimate total fertility rate of 1.9. Average life expectancy at birth in 2050 for males and females combined is assumed to be 79.6 years, and yearly net legal immigration is postulated at 450,000 persons. The high series has a fertility assumption of 2.3, average life expectancy of 83.3 years, and annual net legal immigration of 750,000. The low series assumes a 1.6 ultimate total fertility rate, a life expectancy of 76.7 years, and net immigration of 250,000. For the first time since the U.S. Bureau of the Census began producing projections, both the low- and middle-fertility assumptions are below replacement (2.1). All three fertility assumptions have been lowered from those in 1977 (2.7, 2.1, and 1.7), and the range from the high to low series has narrowed from a full person to 0.7. In addition, for the first time mortality and immigration assumptions differ for each of the series. These changes reflect a continuing trend of low birth rates and a need for flexibility in mortality and immigration assumptions.

Based on the U.S. Bureau of the Census projections, old-age dependency ratios have been calculated and are shown in figure 4. These dependency ratios reflect the aging of the U.S. population in a way that has direct implications for work-related entitlement programs. The three solid lines in figure 4 display the age-related or demographic old-age dependency ratios calculated from 1977 projections of U.S. population and defined as the number of persons 65 years of age and older per 100 persons age 18–64. Series I, II, and III correspond to total fertility rates of 2.7, 2.1, and 1.7, respectively. Even the highest fertility scenario (series I=2.7) implies a further aging of U.S. population over 1980 levels. In no year after 1980 does the old-age dependency ratio under series I fall below the level of 18.4 recorded in 1980, and it reaches a peak of 25.4 under series I in the year 2030, the year in which the baby boom cohorts will be concentrated in the 65–74 age group. Either series II or series III fertility levels imply a significant future increase of elderly in relation to those of working age. From 18.4 in 1980, the old-age dependency ratio is expected to rise by the year 2050 to 30.2 under series II and to 38.8 under series III. Since 1977, U.S. fertility rates have fluctuated around a total fertility rate of 1.8, that is between the levels assumed by series II (2.1) and series III (1.7). If these fertility rates persist, they will imply a doubling of the U.S. old-age dependency ratio in the next 70 years.

The most recent projections (1982) by the U.S. Bureau of the Census tell the same story. The old-age dependency ratios corresponding to the middle series from 1982 are shown by the dashed line in figure 4. If U.S. total fertility rates level off at an average of 1.9 lifetime births per woman, by 2050 the demographic dependency ratio is projected to reach 37.9.

Despite the ease with which demographic dependency ratios can be computed, they are imperfect measures of economic dependency. They assume, for example, that all persons 18–64 are working for pay. In fact, some persons continue working past the customary age of retirement, and not all persons below age 65 are members of the labor force. A more accurate measure of the likely future economic burden that the retired elderly are likely to pose for those in the work force can be computed by dividing the number of persons 65 years of age and older who are out of the labor force by the number of workers aged 18–64 in the labor force. Such a ratio is shown as the top line in figure 4. Observed 1981 age- and sex-specific U.S. labor force participation rates were applied to the 1982 middle series population projections to compute the ratio. This more refined measure of economic dependency also implies a projected doubling of the dependency burden between 1980 and 2050, from 23.5 to 47.6. A continued upward trend in female labor force participation rates may alleviate some of this higher expected dependency, but greater female participation must be viewed against a trend toward earlier retirement among males.

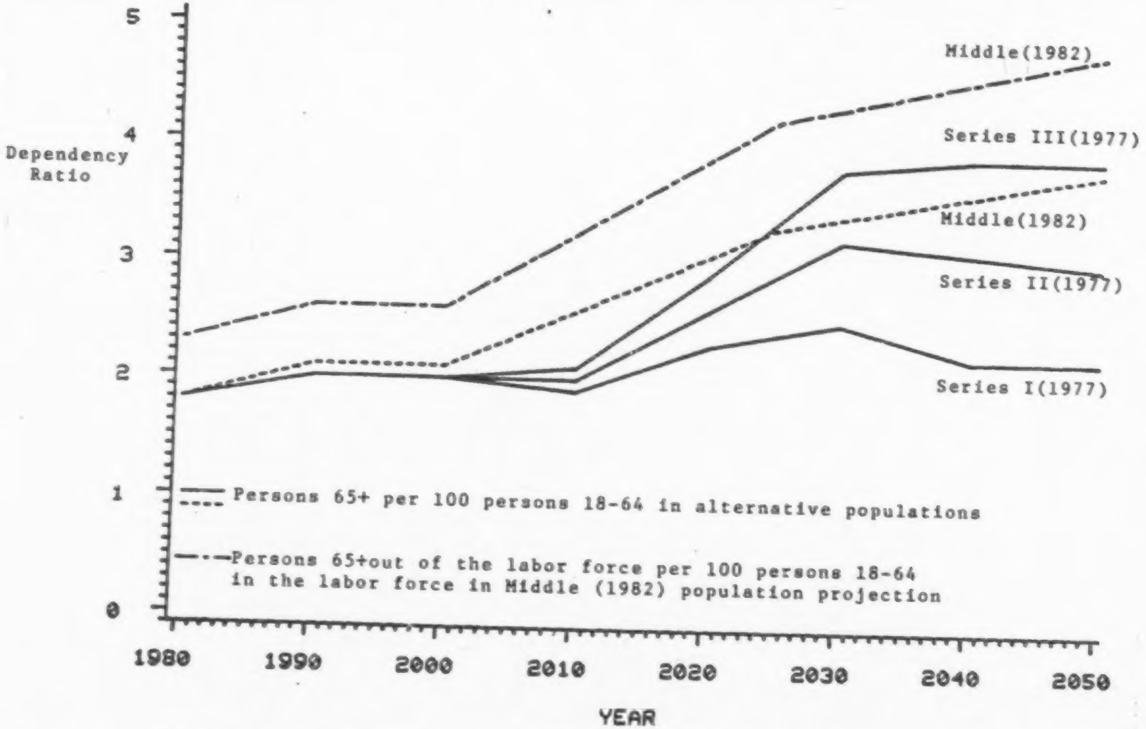

FIGURE 4. Dependency Ratios in Selected U.S. Population Projections: 1980-2050

Source: U.S. Bureau of the Census; Bureau of Labor Statistics.

Appendix C

Legal Rights of Individuals Under the Social Security Program and Federal Retirement Programs As Contrasted With Private Sector Counterparts

by

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16-535 0 - 83 - 33

LEGAL RIGHTS OF INDIVIDUALS UNDER THE SOCIAL SECURITY PROGRAM AND FEDERAL RETIREMENT PROGRAMS AS CONTRASTED WITH PRIVATE SECTOR COUNTERPARTS

Title II of the Social Security Act, as Amended

Social security is the popular name for the old-age, survivors, and disability insurance program (OASDI) created by title II of the Social Security Act of 1935, as amended, 42 U.S.C. § 401 et seq., and administered by the Social Security Administration. Under this program, benefits are paid to workers and their dependents (husbands or wives and children) and to survivors of workers. Created in response to the devastating effects of the Great Depression, the OASDI program is designed to provide a measure of economic security to workers and their families by providing a source of income to these persons after a worker has retired, died, or is unable to work because of a disability.

The social security program has been characterized in a number of ways, sometimes as an example of social insurance, sometimes as a retirement program. Neither term provides a precise legal description of the social security program; in fact, use of such terms as insurance or retirement program may lead to the erroneous perception that the legal rights of individuals under the social security program are similar to those of individuals under private insurance contracts or private retirement programs. While some elements of social security may be analogous to concepts inherent in private insurance and retirement programs, social security, as a governmental program, is a distinctly different concept, resulting in a different set of legal rights and obligations for individuals subject to coverage under the program. Set out below is an analysis of the similarities between social security and similar private sector concepts and an analysis of the rights accruing to individuals under the social security program.

The social security program is sometimes called a "social insurance" program because it contains some elements analogous to private insurance concepts. For example, the program may be said to undertake, through the pooling of a large number of individuals, to provide protection in the form of benefits payable against the "risk" of lost earnings due to either old age, death, or disability. As in the case of private insurance, financial contribution is made to the system by individuals (a tax in the case of social security) in order to finance the benefits which are paid out.

The social security program also contains elements similar to private retirement programs or pension annuities, particularly since retirement, disability, or death are conditions for eligibility to receive benefits under that program. In addition, contributions to the system are made by employers and wage earners while engaged in covered employment, as is done in the case of many private pension plans.

These and other elements of the social security program are indeed similar to insurance and pension concepts in the private sector. However, social security also contains elements not found in such private sector concepts. For example, social security is designed to meet certain social needs and therefore contains a number of "welfare" elements. Thus, there is not a strictly proportionate relationship between benefits and either prior earnings or prior contributions, so that an individual with dependents may receive higher benefits than an individual without dependents even if both worked the same number of years and contributed equal amounts to the program. A major difference between private pension and insurance plans and social security is that the former are legally voluntary. No statutory obligation exists which requires employees to contribute to a private pension plan. On the other hand, participation in the social security program is compulsory, except for certain groups such as employees of State and local governments and nonprofit institutions. Another major difference between the social security program and similar private sector concepts is the lack of contract rights on the part of individuals under social security. Whereas private insurance or pension agreements are contractual in nature, obligating both parties to a given set of legally enforceable terms, the receipt of benefits under the Social Security Act occurs by operation of statutory eligibility definition, which may be modified or changed by Congress at any time. This is not to say that social security beneficiaries have no rights at all, but rather that such rights are statutorily created and are not based upon principles of contract law as are commonly applied to private sector agreements.

The U.S. Supreme Court has specifically addressed the question of the nature of an individual's rights under the social security program in the leading case of *Flemming* v. *Nestor,* 363 U.S. 603 (1960). In that decision, the Supreme Court dealt with a constitutional challenge to a statute which cut off social security benefits to aliens who were deported for affiliation with the Communist Party. The individual challenging the statute had become eligible for retirement benefits in 1955, approximately 1 year after the provision went into effect. In 1956, the individual was deported for having been a Communist Party member from 1933 to 1939, and his social security benefits were thereafter terminated. He challenged the statute on the grounds that he possessed a property interest in his benefits which was being taken without due process, and also that the challenged provision represented an arbitrary classification, also a denial of due process.

The Supreme Court clearly rejected the argument that an individual's expectation of receiving social security payments is to be considered a contractual or an accrued property right. Stated Justice Harlan:

> To engraft upon the social security system a concept of "accrued property rights" would deprive it of the flexibility and boldness in adjustment to everchanging conditions which it demands . . . It was doubtless out of an awareness of the need for such flexibility that Congress included in the original act, and has since retained, a clause expressly reserving to it "(t)he right to alter, amend, or repeal any provision" of the act. § 1104, 49 Stat. 648, 42 U.S.C. § 1304. That provision makes express what is implicit in the institutional needs of the program. . . .
>
> We must conclude that a person covered by the act has not such a right in benefit payments as would make every defeasance of "accrued" interests violative of the due process clause of the fifth amendment. 363 U.S. at 610.

The Supreme Court further emphasized the noncontractual nature of the social security program, whereby eligibility for benefits is held not to depend upon contributions to the program through the payment of taxes but rather on the earnings record of the primary beneficiary.

> The social security system may be accurately described as a form of social insurance, enacted pursuant to Congress' power to "spend money in aid of the 'general welfare,'" *Helvering* v. *Davis* [301 U.S. 619], at 640, whereby persons gainfully employed, and those who employ them, are taxed to permit the payment of benefits to the retired and disabled, and their dependents. Plainly the expectation is that many members of the present work force will in turn become beneficiaries rather than supporters of the program. But each worker's benefits, though flowing from the contributions he made to the national economy while actively employed, are not dependent on the degree to which he was called upon to support the system by taxation. *It is apparent that the noncontractual interest of an employee covered by the act cannot be soundly analogized to that of the holder of an annuity, whose right to benefits is bottomed on his contractual premium payments.* 363 U.S. at 609 (emphasis added).

The High Court also found the argument that the challenged statutory provision constituted an arbitrary governmental classification to be without merit. While the Court determined the interest of a covered employee under the act to be of sufficient substance to be protected from arbitrary governmental action under the due process clause, the Court used the "rational basis" test to ascertain whether in this case the provision violated due process protections. Under this test a statute will be upheld by the Court unless it is patently arbitrary and utterly lacking in any rational justification. Congress could rationally conclude that public funds should not be used to support persons deported for the reasons specified in the statute. Whether such a congressional judgment was sound or equitable was not for the Court to decide.

> "Whether wisdom or unwisdom resides in the scheme of benefits set forth in title II, it is not for us to say. The answer to such inquiries must come from Congress, not the Courts. Our concern here, as often, is with power, not with wisdom." *Helvering* v. *Davis,* supra, at 644. Particularly when we deal with a withholding of a noncontractual benefit under a social welfare program such as this, we must recognize that the due process clause can be thought to interpose a bar only if the statute manifests a patently arbitrary classification, utterly lacking in rational justification. 363 U.S. at 611.

And, the Court deemed it irrelevant that only certain deportees would be affected by the statutory provision. "(I)t is irrelevant that the section does not extend to all to whom the postulated rationale might in logic apply." Id. at 612.

Eleven years later the Supreme Court reaffirmed its holding in *Flemming* v. *Nestor* in the case of *Richardson* v. *Belcher,* 404 U.S. 78 (1971). In that decision a section of the Social Security Act which required a reduction in social security benefits to reflect workmen's compensation payments was challenged as being violative of the due process clause of the fifth amendment.

The Supreme Court, after reviewing and reaffirming its prior holding in *Flemming* v. *Nestor* that social security benefits do not represent a contractual property right, rejected the claim that this provision violated the equal protection clause of the fifth amendment:

> The appellee argues that the classification embodied in § 224 is arbitrary because it discriminates between those
> compensation
> and those who receive compensation from private insurance or from tort claim awards. We cannot say that this difference in treatment is constitutionally invalid. . . . A statutory classification in the area of social welfare is consistent with the equal protection clause of the 14th amendment if it is "rationally based and free from invidious discrimination." 404 U.S. at 81.

The Court determined that a congressional rationale could exist for the statute. For example, the statute could reflect a congressional judgment to the effect that payment of duplicative benefits reduced the incentive of a worker to return to his or her job and so impeded the rehabilitative efforts of State programs. Or, Congress could have rationally differentiated between State programs and private insurance benefits since State programs were originally begun to satisfy a need inadequately met by private insurance and tort programs, and that this need should continue to be met primarily by the States.

In recent years the U.S. Supreme Court has decided a large number of cases dealing with alleged improper classifications among social security beneficiaries. The Court has upheld nearly all the statutory classifications which have the effect of denying or reducing social security benefits to a particular group, if a rational basis may be hypothesized for the classification. See, for example, *Weinberger* v. *Salfi*, 422 U.S. 749 (1975); *Matthews* v. *DeCasto*, 429 U.S. 181 (1976); *Califano* v. *Jobst*, 434 U.S. 27 (1977). Only in situations where the statutory classification is based upon either gender or legitimacy of birth has the Supreme Court struck down such provisions as violative of the fifth amendment. See *Jimenez* v. *Weinberger*, 417 U.S. 628 (1974) (illegitimacy), *Califano* v. *Goldfarb*, 430 U.S. 199 (1977) (gender), and *Weinberger* v. *Wiesenfeld*, 420 U.S. 636 (1975) (gender). In these cases the Supreme Court has applied a higher standard of review in analyzing the statutory classification and has imposed a greater burden on the Government to show that the classification serves important governmental objectives.

Thus, the U.S. Supreme Court has clearly held that the social security program, as an example of social insurance, does not give individuals participating in the program contractual rights to present or future benefits. Congress retains the power to alter or modify the statutory provisions of the Social Security Act at any time. However, social security benefits do represent a significant interest to the individual so that Congress may not exercise its power to modify the Social Security Act free from all constitutional restraint. For example, Congress may not enact modifying legislation which is arbitrary or completely lacking in rational justification under the due process clause of the fifth amendment. In addition, Congress is restricted under the equal protection clause from enacting legislation which classifies recipients according to certain characteristics deemed "suspect" or impinging upon a "fundamental right" as protected by the fifth amendment. Absent such constitutional limitations, however, Congress is free to change the statutory provisions of the Social Security Act as it deems necessary in its legislative judgment.

Thus, while social security, as social insurance, contains elements in common with private insurance, distinct legal differences do exist between the two concepts. The most significant difference is the lack of a contractual relationship between the Federal Government and individuals under social security. While under private insurance contracts, the parties may not unilaterally change the terms of the agreement, the Federal Government retains the power to modify the statutory provisions of the Social Security Act at any time. Individual rights are thus governed by the Social Security Act, as currently amended, not as in effect when an individual began contributing to the system or when an individual begins to receive benefits.

Federal Retirement Programs: Civil Service, Military Retirement, and Railroad Retirement

Three of the major Federal retirement programs include the Federal civil service retirement system, the military retirement system, and the railroad retirement system. The civil service retirement system is a staff retirement plan for Federal civilian personnel. 5 U.S.C. §8331 et seq. This system is financed by a combination of employee contributions and Government payments to the civil service retirement and disability fund. The military retirement system provides for military retired pay based upon length of military service. 10 U.S.C. §3911 et seq. The military retirement system is noncontributory in the sense that military personnel make no direct contribution from their actual pay toward the cost of their retirement. In addition, there is no established military retirement fund; rather, retired pay costs are funded out of annual Department of Defense appropriations. The railroad retirement system is an example of a retirement system for a class of nongovernmental workers which is administered by the Federal Government. 45 U.S.C. §231 et seq. The system is financed by employer and employee taxes, and both taxes and benefits are closely coordinated with provisions under the social security system.

Legal issues relating to individual rights under Government pension programs such as the ones described above generally involve the extent to which covered employees who have participated in such programs may be said to have vested property rights in their retirement benefits which are protected by the due process clause of the fifth amendment.

The U.S. Supreme Court, in very early decisions, has held that a pension granted by the Federal Government confers no right which cannot be revised, modified, or recalled by subsequent legislation. The High Court has described a pension as a "bounty of the Government." *Walton* v. *Cotton,* 19 How. (60 U.S.) 355, 358 (1857) (Revolutionary War pension). The Court has also held that no pensioner has a vested legal right to his pension, and that Congress has the right to give, withhold, distribute, or recall the pension at its discretion. *United States ex rel. Burnett* v. *Teller,* 107 U.S. 64, 68 (1883) (Mexican War pension). And in *Pennie* v. *Reis,* 132 U.S. 464 (1889) the High Court held that until the pension or retirement pay (in this case a city police pension) is due, the employee's right thereto is not contractual but ". . . a mere expectancy, created by the law, and liable to be revoked or destroyed by the same authority." Id. at 471. See also *United States* v. *Fisher,* 109 U.S. 143 (1883); *Butler* v. *Pennsylvania,* 10 How. (51 U.S.) 402 (1850); and *McFarland* v. *Bieber,* 32 App. D.C. 513 (D.C. Cir. 1909).

The general rule that a public employee who has contributed to a compulsory statutory retirement or pension fund has no vested right in it until the particular event happens upon which the money or part of it will be paid has been reaffirmed by recent court cases dealing with the Federal Civil Service Retirement Act and other Federal retirement programs. In *Stouper* v. *Jones,* 284 F. 2d 240 (D.C. Cir. 1960), a civil service employee had retired and was receiving disability annuity payments. While the retired employee was receiving such payments, Congress amended the Civil Service Retirement Act by adding a new provision to the effect that, if the earning capacity of an annuitant were restored to a level fairly comparable to the current rate of pay for the position held immediately prior to retirement, the annuity would be discontinued. The retirement division of the Civil Service Commission determined that the employee had been restored to such an earning capacity and accordingly the disability annuity was discontinued. In upholding the Civil Service Commission's determination, the Court of Appeals cited the established rule that "a pension granted by the Government confers no right which cannot be revised, modified, or recalled by subsequent legislation." Id. at 242. In addition, the Court noted that benefits under the Civil Service Retirement Act, like those under the Social Security Act, are not based on the employee's contributions to the retirement fund, but instead on the employee's earnings record and years of service. The Court thus concluded that "an employee has no right under the Retirement Act based on contractual annuity principles." Id. at 243.

Other Federal court decisions have reached similar conclusions with respect to the Federal civil service retirement system: *Rafferty* v. *United States,* 210 F. 2d 934 (3d Cir. 1954); *Steinberg* v. *United States,* 163 F. Supp. 590 (Ct. of Claims 1958); *Prentiss* v. *United States,* 117 F. Supp. 200 (Ct. of Claims 1953).

The same principle that there exists no vested or contractual right to retired pay under a Government pension program applies to service in the armed forces. For example, in *Goodley* v. *United States,* 441 F. 2d 1175 (Ct. of Claims 1971), the Court of Claims held that an individual's temporary service as a member of the Coast Guard Reserves could not be counted in computing service for longevity retired pay. In denying the individual's claim for longevity retired pay the court stated: "The difficulty with plaintiff's position is that it collides with the well established legal principle that there is no vested or contractual right to retired pay, which is dependent upon statutory right rather than upon common law rules governing private contracts." Id. at 1178.

More recently, in *United States Railroad Retirement Board* v. *Fritz,* 449 U.S. 166 (1980), the U.S. Supreme Court reaffirmed that Congress has broad power to modify the provisions of Federal retirement programs, even where retirement benefits to which an employee will be entitled upon retirement will be reduced. At issue in the *Fritz* case were the 1974 amendments to the Railroad Retirement Act. While the amendments were designed to place the railroad retirement system on a sound financial basis, they also had the effect of reducing the benefits paid to many retirees who had left the railroad industry prior to 1974. The High Court upheld the validity of the 1974 amendments, stating that the provisions were rationally related to the congressional purpose of insuring the solvency of the retirement system and protecting vested benefits. Thus, Congress clearly has the power to make adjustments in the eligibility of retirees for benefits under Federal retirement programs. Such adjustments will be sustained by the courts if reasonably related to the purposes of the Federal program, even where there may be some disparity of impact on individual retirees.

Federal courts have recognized as an exception to the rule that a pensioner has no vested right in a pension, the proposition that vested rights do accrue where a particular pension payment has become due. Thus, when the particular event happens upon which a payment or part of a payment is to be paid occurs, then there exists a vested right in the person to such payment, his interest in the pension fund being, until then, a mere expectancy created by law. *MacLeod* v. *Fernandez, supra;* and, *Pennie* v. *Reis, supra.*[1] Of course, a pensioner's vested rights still derive from the statutory provisions creating such rights. And, Congress retains the power to legislatively alter the statutory provisions setting forth pension benefits at any time. This is not to say that vested pension rights are unprotected; Congress' power to amend legislation is limited by the due process and equal protection clauses of the fifth amendment to the Constitution. Thus, Congress may not enact modifying legislation which is arbitrary or lacking in rational justification. *United States Railroad Retirement Board* v. *Fritz, supra.*

The above analysis of individuals' rights to Federal pensions may be contrasted with the rights of individuals to pensions under private pension plans. The chief difference between governmental pensions and pensions in the private sector is the availability, with respect to private pensions, of common law contract principles. On this point the U.S. Supreme Court has stated in a footnote that "(u)nder established contract principles, vested retirement rights may not be altered without the pensioner's consent. See generally Note, 70 Col. L. Rev. 909, 916–920 (1970)." *Allied Chemical & Alkali Workers* v. *Pittsburgh Plate Glass Co.,* 404 U.S. 157, 181 n. 20.[2] Thus, private pension plan agreements are considered to be contractual in nature, giving rise to common law enforcement remedies upon breach of obligations on either the employer or employee side of the agreement. The extent of such rights may depend upon whether the private pension plan results entirely from the initiative of the employer or whether the plan is part of collective bargaining on the part of employees:

> When the pension plan results from the initiative of the employer, rather than through collective bargaining between the employer and a union, unilateral contract obligations may attach to the actions of the employer. Initiation of the plan may be construed as an offer by the employer. The employee accepts by fulfilling the requirement that he continue in his position for a specified number of years. At this point benefits either vest and begin to accrue as the employee continues in service or vest immediately if the employee retires. Prior to vesting the em-

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[1] It is noted that with respect to state pension statutes, that State courts have treated the rights of employees under such statutes somewhat differently. In some jurisdications State courts have viewed rights in compulsory contribution pension systems as being nonvested only during the period prior to an employee's fulfillment of the requirements for grant of the pension. Thereafter, the pension rights are deemed to vest and are immune from abolition. In addition, in some jurisdictions the question whether public employees' statutory pension rights are vested has been handled legislatively. Thus, the New York State Constitution was specifically amended to provide that such pension rights are vested. And an Ohio statute relating to firemen's and policemen's pensions contains a similar provision. See the annotation at 52 A.L.R. 2d 437, "Vested Right of Pensioner to a Pension," for a general discussion and listing of State cases and statutes on this subject.

[2] This statement was reaffirmed by the Court in *United Mine Workers of America Health & Retirement Funds* v. *Robinson,* Docket No. 81-61 (March 8, 1982), at Slip p. 12.

> ployer may withdraw his pension offer, as in the case with any offer for a unilateral contract . . . .
>
> When a pension plan is not unilateral, but instead is established and included in the collective bargaining agreement it is bilateral in nature and enforceable according to its terms. Such plans usually set out specifically the rights of covered employees, although which employees are intended to benefit from their provisions has, at times, been uncertain. Disputes over the meaning and application of terms may result in arbitration and many agreements specifically so provide. Note, 70 Col. L. Rev. 909, 917-918 (footnotes omitted).

Other common law legal theories used by the courts to protect the rights of individuals under private pension plans include the trust theory, whereby the fiduciary obligations inherent in the administration of a pension plan may be enforced, and the theory of promissory estoppel, whereby an enforceable right may be granted to a pensioner or would-be pensioner who relied to his detriment on representations that he would be entitled to benefits. Some courts have also relied upon a theory of deferred wages in enforcing pension agreement priovisions.[3] For example, in *Inland Steel Co.* v. *N.L.R.B.*, 170 F. 2d 247 (7th Cir. 1948), cert. denied, 336 U.S. 960 (1949), the circuit court held that pension and retirement benefits were actually wages for purposes of collective bargaining, citing with approval the language of the National Labor Relations Board:

> With due regard for the aims and purposes of the (National Labor Relations) Act and the evils which it sought to correct, we are convinced and find that the term "wages" as used in section 9(a) must be construed to include emoluments of value, like pension and insurance benefits, which may accrue to employees out of their employment relationship . . . . *Inland Steel Co.* v. *N.L.R.B.*, 77 N.L.R.B. 1, at 4.

There also exist a number of State and Federal statutes which provide protections for participants and beneficiaries of private pension plans. For example, a retiree would have a Federal remedy under § 301 of the Labor Management Relations Act for breach of contract if his benefits were unilaterally changed. See *Allied Chemical & Alkali Workers* v. *Pittsburgh Plate Glass Co.*, 404 U.S. 157, at 181, n. 20. The most comprehensive Federal statute providing protection for participants and beneficiaries of private pension plans is the Employee Retirement Income Security Act of 1974, Pub. L. 93-406, as amended (ERISA). ERISA does not require that employers provide pension plans, but those that do must comply with its provisions. Such provisions include minimum standards that plans must meet with regard to coverage of employees, vesting of benefits, and certain minimum funding requirements. ERISA also requires that pension funds be handled prudently and solely in the interests of the participants and beneficiaries, and that participants be informed of their rights under the pension plan. ERISA also established a program to guarantee the payment of pension benefits in case a plan is ended or an employer becomes insolvent.

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[3] This theory of pension benefits as a form of deferred wages has been increasingly recognized by courts in the area of collective bargaining. See, e.g., *Ball* v. *Victor Adding Machine Co.*, 236 F.2d 170, 173 (5th Cir. 1956).

Thus, while there are a number of similarities between private pension plans and Federal retirement programs, there also exist distinct legal differences between the two concepts. While private pension plans are subject to common law principles such as contract rights and obligations, Federal retirement programs are statutory in nature and so a contractual relationship does not exist between the Federal Government and individual participants or beneficiaries. Congress retains the power to alter or modify the statutory provisions of Federal retirement programs at any time, subject to certain constitutional limitations, including the due process requirements of the fifth amendment.

Appendix D

Retirement Programs for Disabled Workers

by

Mary F. Smith

Educational Public Welfare Division

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RETIREMENT PROGRAMS FOR DISABLED WORKERS

Introduction

This appendix summarizes major provisions of the principal retirement systems for disabled workers. Information regarding eligibility standards and benefit determination criteria is summarized under each program heading and a comparison of these provisions is made in the final section. General trends regarding program data are discussed under each heading and annual participation data are presented in the tables at the end of this appendix.

Social Security Disability Insurance and Supplemental Security Income

ELIGIBILITY

To be eligible for social security disability insurance, a worker must be both "fully" and "disability" insured. To be fully insured for life, a worker must have credit for working 40 calendar quarters in covered employment. If a person has not worked 40 quarters, he is still fully insured if he has at least 1 quarter of coverage for each year after 1950, or if later, after the year in which he became 21. There is also a requirement for a minimum of 6 quarters of coverage. To be disability insured, the worker must have 20 quarters of coverage in the preceding 40 quarters (there are exceptions for younger workers and the blind). The worker must be unable to do any kind of work which exists in the national economy (taking into consideration age, education, and work experience) because of the disability, and the disabling condition must be expected to last at least 12 months or to end in death.

The supplemental security income program available to low-income individuals who may not have worked the required amount under covered employment uses the same criteria for determining disability as the disability insurance program; however, the quarters of coverage requirements do not apply. Instead, an individual must be able to meet a means test.

PROGRAM DATA

During the early 1970's, the number of persons receiving social security disability insurance increased at a rate of over 10 percent per year. In 1976 and 1977, the rate of increase began to diminish and between 1978 and 1979 the number of recipients began to decrease. This decrease has continued and reached −2.96 percent in 1981, the last year for which data are available. It is estimated that this downward trend continued during 1982.

See table 1 for annual data on social security disability insurance beneficiaries.

The total number of blind and disabled persons receiving supplemental security income (SSI) increased 72.8 percent between 1974 and 1980. Of the total SSI recipients, which includes aged, blind, and disabled, the proportion which is blind or disabled increased from 42 percent to 56.4 percent of the total number of SSI recipients. The SSI program was initially implemented in 1974, and the sharp increases in blind and disabled recipients may reflect increased awareness of available benefits rather than increased incidence of blindness or disability.

See table 2 for annual data on recipients of supplemental security income.

BENEFIT DETERMINATION

Social security disability insurance benefits are based on average monthly earnings prior to the onset of the disability. Benefits are indexed to reflect national wage growth (up to 5 years of low earnings are excluded). The benefits are tax free and are adjusted annually for increases in the cost of living. Benefits are also provided to dependents, although there are maximum family benefit limits. There is a restriction on the amount the worker can earn and still receive disability benefits. Disability benefits may be offset if an individual is simultaneously receiving workers compensation benefits or other public disability benefits.

In the supplemental security income program, there are flat Federal benefit amounts payable for a single person and for a couple. These amounts are supplemented by many States, and may be reduced because the individual or couple has other income. SSI payments are exempt from Federal income tax.

Military Disability Retirement

ELIGIBILITY

A member of a military service who becomes disabled and, as a result, is determined to be unfit for duty may receive disability retired pay if he has over 20 years of creditable service or if his disability is rated at 30 percent or more. The disability rating is determined by applying the standard schedule of rating disabilities in use by the Veterans Administration at the time of the determination. These retirement provisions do not apply if the disability is the result of intentional misconduct or willful neglect or was incurred during a period of unauthorized absence.

If the disability may not be permanent, the individual is placed on temporary disability retirement and is subject to physical examination no less than once every 18 months. After 5 years, the individual must either be retired for permanent disability or, if the disability is less than 30 percent and the individual has less than 20 years of service, returned to active duty or separated.

PROGRAM DATA

Between fiscal year 1973 and fiscal year 1981, the number of disabled military retirees as a percentage of all military retirees declined from 17.1 percent to 10.9 percent. The number of disabled retirees declined by 7.1 percent over the past 8 years.

See table 3 for annual data on disabled military retirees.

BENEFIT DETERMINATION

The disability retirement benefit is determined by a formula using the basic pay of the member's grade at retirement and the greater of the percent of disability or a multiple of years of active service. For permanent disability retirement, the maximum benefit is 75 percent of basic pay, and the minimum benefit is 30 percent of basic pay. The minimum benefit while on temporary disability retirement is 50 percent of basic pay.

If disabled retirees accept veterans' disability compensation from the Veterans Administration, they must forfeit, dollar for dollar, their military retirement pay.

Members who joined the military prior to 1975 and subsequently retired on disability are exempt from Federal income taxes. Those who joined after 1975 and retired on disability are not entitled to tax exempt status, except under certain conditions.

Members found unfit for further service but not eligible for disability retirement are entitled to a severance payment equal to 2 months pay for each year of service not to exceed 2 years of basic pay.

Civil Service Retirement System

ELIGIBILITY

Federal employees are eligible at any age for disability retirement if they have 5 years of creditable civilian service and if they become unable, because of disease or injury, to satisfactorily and efficiently perform the duties of their current grade and class of position, and are not qualified for reassignment to a vacant position in the same agency at the same pay and grade. Employees unable to do one essential function of their jobs are considered to be totally disabled. The system does not provide for partial disability. After an initial determination of disability, periodic reexaminations are required until the annuitant reaches age 60 or until the disability is found to be permanent. If the disability occurred on the job, the employee has a choice between civil service retirement system benefits and the benefits provided under the Federal Employees Compensation Act.

PROGRAM DATA

Between 1971 and 1980, the proportion of Federal employees who became disabled and retired remained at approximately 27 percent of total Federal retirees.

See table 4 for annual data on disabled civil service retirees.

BENEFIT DETERMINATION

The annuity paid to disabled Federal employees under the civil service retirement system is a guaranteed minimum which is the lesser of the following 3 amounts:

(1) 40 percent of the employee's 3 highest years of annual pay;

(2) the annuity that could have been paid if the individual had continued working until age 60 at the same 3 highest years of annual pay; and

(3) the annuity computed under the general formula for other retirees if that produces a larger basic annuity (which it does if creditable service is at least 22 years).

The annuity is continued until earning capacity is restored or until Federal reemployment. Earning capacity is considered restored when, in each of 2 consecutive calendar years, the annuitant's income is at least 80 percent of the current salary of the position from which the person retired.

If the disability occurred while on duty, the employee may choose to receive benefits under the Federal Employees Compensation Act (FECA). FECA pays disabled employees two-thirds of their lost earnings; if the employee had dependents, FECA pays three-fourths of lost earnings. Compensation under FECA may also include lump sum payments for certain serious injuries, attendants for those requiring constant attention, allowances for rehabilitation, and some payment for other expenses incident to the injury.

Federal income tax must be paid on civil service retirement income.

Railroad Retirement

ELIGIBILITY

The railroad retirement system is a federally legislated retirement system covering employees in the railroad industry with benefits and financing partially intertwined with the social security system.

A railroad employee is eligible for a disability annuity at any age if the individual is totally and permanently disabled for *all regular work* and has at least 10 years of creditable railroad service.

A disability annuity can be paid for occupational disability at age 60 if the employee has at least 10 years of railroad service or at any age if the employee has at least 20 years of service, when the employee is permanently disabled for his or her *regular railroad occupation.* A "current connection" with the railroad industry is also required for an annuity based on occupational, rather than total, disability. Generally, an employee has a "current connection" if he has worked for a railroad in at least 12 of the 30 months preceding retirement.

A supplemental annuity can be paid at age 60 if the employee has at least 30 years of service or at age 65 if the employee has 25–29 years of railroad service.

PROGRAM DATA

Between fiscal year 1971 and fiscal year 1980, disabled retirees as a percent of total annuitants varied from 6.2 percent to 11.1 percent. Since fiscal year 1975, the number of disabled retirees has not exceeded 7.4 percent of total annuitants.

See table 5 for annual data on disabled railroad retirees.

BENEFIT DETERMINATION

Railroad disability retirement annuities are calculated in the same manner as other railroad retirement annuities are determined. A totally and permanently disabled employee is deemed to be age 62 for purposes of determining benefit amount. The amount is based on a tier I portion which is calculated under a formula similar to the one used for social security benefits. This benefit is based on the employee's taxable railroad compensation and social security-covered wages and is reduced by the amount of any social security benefit received. The tier II portion is based on railroad service only and is not reduced because of social security benefit amounts received by the annuitant. The tier II amount is generally equal to 30 percent of the tier I amount before such amount is reduced for receipt of social security benefits. In addition to tiers I and II, some railroad retirees are paid an additional annuity amount referred to as a dual benefit windfall which protects benefit equities established prior to 1975.

If an annuity is based on disability, payment is not made for any month in which the annuitant earns more than $200. Withheld benefits are restored if earnings for the year are less than $2,500.

Railroad retirement income is exempt from Federal income tax.

Private Disability Income Plans

ELIGIBILITY

It is estimated that approximately 60 percent of the employees in business and industry are covered by a private disability income retirement plan.[1] Virtually all these individuals are also covered by social security disability insurance.

Generally, employers provide both short-term benefits (for 26 weeks or less) and long-term benefits which begin after the short-term benefits have expired. Short-term benefits are generally available to employees unable to perform the usual duties of employment and generally do not exceed 60 percent of pay. Most short-term disability plans are provided voluntarily by the employees, but five States (California, Hawaii, New Jersey, New York, and Rhode Island) and the Commonwealth of Puerto Rico require employers to provide short-term disability income for temporary nonoccupational disabilities.[2] Eligibility and benefit levels vary from State to State.

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[1] Employee Benefit Research Institute. The Disability Income Tax Plan. p. 1.

A recent study [3] found that 8 out of 10 private pension plans include long-term disability retirement provisions for disabled employees. Plan participants must be totally and permanently disabled to become eligible for these benefits. Eligibility for a disability pension under a "pattern plan" is generally based on 10 years of service. Pattern plans are generally available to union and blue collar workers. Under "conventional plans," available to white collar and salaried workers, disability retirement benefits are generally provided upon the onset of the disability under a separate long-term disability plan. Eligibility for the long-term disability plans is generally based on the inability to perform any occupation the employee might reasonably be expected to perform based on his age, education, and experience. Many long-term disability plans provide that the employee must be eligible for social security disability insurance to be eligible for the private long-term disability plan.

BENEFIT DETERMINATION

Long-term disability benefits generally total about 50 to 60 percent of base pay minus other available benefits. Some plans specify that long-term disability benefits plus family social security benefits cannot exceed 75 percent of base pay. There is a limited exclusion from Federal income tax for private disability income benefits.

Comparison of Disability Retirement Systems

ELIGIBILITY

All the disability retirement plans require a minimum period of service except long-term disability plans available to workers in the private sector and supplemental security income. The long-term disability plan is really a form of private disability insurance purchased by private sector employers for their employees to supplement social security disability insurance and is not tied to private old-age retirement plans.

Public sector disability retirement provisions require various periods of time in service. Social security disability insurance requires that workers be both "fully" and "disability" insured based on their work record over the preceeding 40 quarters. Military disability retirement is based on both time in service (20 years) *or* percent disability (30 percent or more). Federal employees are eligible after 5 years of service, and railroad employees are eligible after 10 years of service.

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[2] In these States benefits are provided through State-administered trust funds (composed of employer and employees contributions), through private insurance, or through self-insurance by employers.

[3] Bankers Trust Co. Corpcrate Pension Plan Study: A Guide to the 1980's.

Disability retirement programs vary with regard to a recognition of partial and/or temporary disability. Social security disability insurance and supplemental security income are available only to the totally and permanently disabled. Under military disability retirement, the degree of disability is a determining factor, and provisions are made for reevaluating persons with temporary disability. The civil service disability retirement system does not recognize partial disability, but does require periodic reexamination if the disability may be temporary. In addition to total and permanent disability, the railroad system recognizes occupational disability if certain age and years of service requirements are met. In the private sector, a distinction is made between short-term benefits of 26 weeks or less and long-term benefits which commence when short-term benefits expire. Long-term disability benefits under private disability insurance plans are generally only available to persons who are totally and permanently disabled.

The definition of disability varies in all the plans except that social security disability insurance and the supplemental security income program use the same definition based on the inability to do any work in the national economy and on the expectation that the disability will last at least 12 months or end in death. Under military disability retirement, a disability is rated to determine the percent of loss of function. The civil service disability retirement system provides that a person is disabled if, because of the disability, he is unable to do one or more essential functions of his job and if he cannot be reassigned to a vacant position in the same agency at the same pay and grade. Under the railroad retirement system an individual is considered to be totally and permanently disabled if he cannot perform "all regular work" and is considered occupationally disabled when he is unable, due to disability, to carry out his regular railroad occupation. Private disability insurance plans generally require, as a condition for eligibility, that the disabled individual be unable to perform any occupation for which he might otherwise be considered eligible based on his age, education, and experience. Many such private long-term disability plans provide that the employee must be eligible for social security disability insurance as a condition for eligibility for private disability insurance.

BENEFIT DETERMINATION

The level of benefits in all the disability retirement systems is generally based on the level of earnings of the employee prior to the onset of disability modified by other factors. Benefit levels tend to have upper and/or lower limits determined by a specified percentage of predisability earnings. Under social security disability insurance, there is a maximum family benefit based on predisability earnings. Military disability retirement is based on a benefit maximum of 75 percent of basic pay and a minimum of 30 percent of basic pay and utilizes years of service and percent of disability as other determining factors. The civil service retirement system uses a percent of predisability earnings (40 percent) and the general retirement formula to establish a guaranteed minimum disability benefit. Railroad retirement benefits are based initially on predisability earnings with two subsequent adjustments which provide additional benefits.

Disability retirement systems vary with regard to income tax status. Disabled individuals are not required to pay Federal income tax on social security disability insurance or on supplemental security income. Military disability retirees are not required to pay Federal income tax if they joined the military prior to 1975. Those who joined after 1975 are not entitled to tax exempt status except under certain conditions. Federal income taxes must be paid on civil service disability retirement, but railroad disability retirement beneficiaries are not required to pay Federal income tax. There is limited exclusion from Federal income tax for disability retirements benefits under private long-term disability plans.

Table 1.—SOCIAL SECURITY DISABILITY INSURANCE BENEFICIARIES

[Per calendar year]

Year	Number of disabled workers	Percent change from previous year
1971	1,647,684	
1972	1,832,916	+11.2
1973	2,016,626	+10.0
1974	2,236,882	+10.9
1975	2,488,774	+11.3
1976	2,670,208	+7.3
1977	2,837,432	+6.3
1978	2,879,774	+1.5
1979	2,870,590	−.32
1980	2,861,253	−.33
1981	2,776,519	−2.96
1982 (est.)	2,723,000	−1.93

Source: Staff Data and Materials Related to the Social Security Disability Insurance Program, Committee Print 97-16, August 1982, p. 20. (Percentages computed by the Congressional Research Service.)

Table 2.—SUPPLEMENTAL SECURITY INCOME RECIPIENTS

Period	Number of persons			
	Blind	Disabled	Total [1]	Percent blind and disabled
January 1974	72,390	1,278,133	3,215,632	42.0
December:				
1974	74,616	1,635,539	3,996,064	42.8
1975	74,489	1,932,681	4,314,275	46.5
1976	76,366	2,011,876	4,235,939	49.3
1977	77,362	2,109,409	4,237,692	51.6
1978	77,135	2,171,890	4,216,925	53.3

Table 2.—SUPPLEMENTAL SECURITY INCOME RECIPIENTS—Continued

Period	Number of persons			
	Blind	Disabled	Total [1]	Percent blind and disabled
1979	77,250	2,200,609	4,149,575	54.9
1980	78,401	2,255,840	4,142,017	56.4

[1] Total includes aged, blind, and disabled.

Source: Background Material and Data on Major Federal Expenditure Programs Under the Jurisdiction of the Senate Committee on Finance. Committee Print 97-13, April 1982, p. 181. (Percentage computed by the Congressional Research Service.)

Table 3.—MILITARY DISABILITY RETIREES

[Average number of persons per year]

Fiscal year	Retired disabled persons		Total persons retired [1]	Disabled retirees as percent of total retirees
	Temporary	Permanent		
1973	19,463	138,113	923,635	17.1
1974	17,067	142,317	983,788	16.2
1975	14,795	144,791	1,049,553	15.2
1976	13,391	146,141	1,109,357	14.4
1977	12,540	141,142	1,175,026	13.1
1978	12,426	140,354	1,219,844	12.5
1979	12,306	140,834	1,261,913	12.1
1980	10,762	139,003	1,306,232	11.5
1981	9,525	136,803	1,345,702	10.9

[1] Total includes non-disability retirees and survivor annuitants.

Source: Department of Defense Selected Manpower Statistics Fiscal Year 1981. (Percentages computed by the Congressional Research Service.)

Table 4.—FEDERAL EMPLOYEE ANNUITANTS ON THE RETIREMENT ROLL AT END OF FISCAL YEAR

Fiscal year	Disability retirees	Total employee annuitants [1]	Percent disabled
1971	195,732	711,323	27.5
1972	205,413	758,469	27.1
1973	219,786	843,520	26.1
1974	238,543	938,654	25.4
1975	257,774	989,786	26.0
1976	279,326	1,038,337	26.9
1977	306,380	1,096,561	27.9
1978	323,446	1,148,142	28.2
1979	333,230	1,189,942	28.0

Table 4.—FEDERAL EMPLOYEE ANNUITANTS ON THE RETIREMENT ROLL AT END OF FISCAL YEAR—Continued

Fiscal year	Disability retirees	Total employee annuitants [1]	Percent disabled
1980	343,251	1,247,886	27.5

[1] This total includes only retired Federal employees. It does not include other annuitants such as widows, widowers, and children.

Source: Civil Service Retirement System: History, Provisions, Financing, Committee Print 97-3, June 30, 1981, table 5, p. 52. (Percentages computed by the Congressional Research Service.)

Table 5.—RAILROAD DISABILITY RETIREMENT ANNUITANTS

[Persons per year]

Period	Disabled retirees [1]	Total annuitants [2]	Percent disabled
Fiscal year:			
1971	8,520	113,832	7.5
1972	10,862	106,362	10.2
1973	11,010	99,088	11.1
1974	10,380	94,745	11.0
1975	8,499	137,034	6.2
1976	7,320	106,729	6.9
July-September 1976	1,397	27,902	5.0
Fiscal year:			
1977	7,074	95,992	7.4
1978	6,334	87,104	7.3
1979	5,847	83,538	7.0
1980	5,640	83,476	6.8

[1] Disabled retirees include retirees with total and permanent disability and retirees with an occupational disability. Does not include survivors and dependents.

[2] Total annuitants include all retirees, spouses, aged widow and widowers, disabled widow and widowers, widowed mothers, children, and parents.

Source: Statistical Supplement, 1980 Annual Report, U.S. Railroad Retirement Board, table B-1, p. 19. (Percentages computed by the Congressional Research Service.)

Appendix E

The Tennessee Valley Authority Retirement System

by

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THE TENNESSEE VALLEY AUTHORITY RETIREMENT SYSTEM*

Introduction

There are 38 Federal civilian and military retirement systems. The largest two, civil service and military retirement, account for over 95 percent of total benefits paid. Among the smaller programs is the distinctive Tennessee Valley Authority (TVA) retirement system. The TVA retirement system is multifaceted, exhibiting several characteristics of retirement arrangements more commonly found in the private sector. It is an example of a Federal retirement system coordinated with social security, making it of interest in light of the recent recommendation of the National Commission on Social Security Reform and consideration by the Congress to bring newly hired Federal employees into the social security program. Benefits for members of the TVA retirement system include an employer-financed pension, an employee-financed annuity, and a social security benefit. In addition, the system offers a voluntary savings program and an optional level-income plan which enables early retirees to achieve a level retirement income through a redistribution of pension benefits.

Background

The Tennessee Valley Authority, created by Congress in 1933, is a Government corporation charged with the development of the Tennessee River system through the construction of dams used for flood control and navigation purposes and for creation of electric power. TVA personnel are employed under a merit system and vary in number depending upon the amount of construction activity. Employees fall into one of two categories. Construction workers are employed at hourly rates of pay, and maintenance and operations workers are paid on an annual basis and include technical staff and administrative and policymaking officials.

The TVA retirement system developed in the late 1930's and went into effect in 1939. TVA employees originally were classified as part of the excepted (noncompetitive) civil service and were precluded from participation in the civil service retirement system. In 1942, the civil service retirement system was extended to employees who had been denied coverage previously and were not yet covered by a retirement system. But by then, the TVA employees were covered by their own system. The TVA retirement system covers all individuals employed at an annual rate of pay except (a) members of the Board of Directors of the TVA, (b) members of the civil service retirement system, (c) any person employed for a predetermined period of 6 months or less, (d) any person employed part time, and (e) certain persons whose services are engaged on a contract basis. Employees who transfer to TVA from positions covered by the civil service retirement system without a break in service of more than 3 days are required to remain in the civil service retirement system. Construction workers are not members of the TVA retirement system because their employment is usually intermittent and temporary.

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*Information for this paper was drawn from TVA Retirement System 1981 Annual Report, March 1982; Rules and Regulations of the TVA Retirement System, January 1980; Myers, Robert J., Tennessee Valley Authority Retirement Plan: Coordination With Old-Age, Survivors, and Disability Insurance, Social Security Bulletin, Vol. 20, No. 9, September 1957.

Initially both groups of TVA employees, construction workers as well as maintenance and operations employees, were not covered by the social security program. Absence of social security coverage, however, was felt to be a handicap in recruiting TVA personnel since those who had social security coverage in previous employment interrupted that coverage to come to TVA. The Social Security Act Amendments of 1950 provided coverage for the construction workers, those engaged in hourly trades and labor activities. The Social Security Act Amendments of 1956 provided that social security coverage could be extended to the maintenance and operations employees if a plan for coordination of the TVA staff retirement system and social security was submitted to and approved by the Secretary of Health, Education, and Welfare.

The coordinated plan, submitted and approved, provides social security coverage to employees in the TVA retirement system in the same manner as to employees in private industry. TVA employees pay the scheduled employee contribution and the TVA pays the matching employer contribution. The TVA retirement system pension benefit is modified to reflect the social security coverage. As of September 1982, the TVA employed approximately 39,000 people, of whom 28,000 were members of the TVA retirement system.

Benefits

The basic retirement benefits for a member of the TVA retirement system are an employer-financed pension and an employee-financed annuity. Social security benefits are received in addition to the annuity and pension. As in the civil service retirement system, the TVA retirement benefit (pension and annuity combined) is not taxable until the employee's contributions are recovered, but is taxable thereafter.

The employer-financed pension is 1.3 percent of the employee's high-3 average annual salary multiplied by years of service less a social security offset. The offset equals 2 percent of the employee's social security benefit at age 65 multiplied by years (not in excess of 30) of creditable service rendered after 1955. This defined benefit pension is adjusted yearly for changes in the cost of living. Cost-of-living increases are payable each year that the 12-month average of the Consumer Price Index exceeds by as much as 1 percent the previous year's average. The maximum increase permitted for any year is 5 percent, except at the adoption of the Retirement System Board and approval of TVA. The cost-of-living increase effective

January 1, 1981, was 7 percent. An option permitting survivor benefit coverage, if elected, reduces the amount of the retiree's pension.

The annuity portion of the TVA retirement system is financed by compulsory employee contributions. The amount of the annuity is based on the actuarial value of the employee's own accumulated contributions at retirement. Thus, the more contributed, the greater the annuity will be at retirement. The annuity is not indexed for changes in the cost of living. The standard rate of contribution is 6 percent of an employee's earnings. Additional contributions may be made or an employee may elect to reduce his contributions to the annuity by 3 percent on that part of his annual salary not in excess of the current social security covered earnings base. An employee may contribute as much as 16 percent of regular pay or as little as 3 percent of salary up to the social security earnings base and 6 percent on the excess. Like the pension, the annuity is reduced if a survivor benefit is elected.

Employees may elect to have their annuity contributions credited to either a fixed benefit fund or a variable annuity fund, or divided between the two funds. And, that election is open to change. Contributions directed to the fixed benefit fund are credited with interest at an annual rate. The value of the accumulated contributions in the variable annuity fund varies from month to month depending upon the performance of the investment portfolio. Investments of the two funds include common stocks, preferred stocks, notes, bonds, convertible securities, and real property. A retiree may choose to receive a variable annuity or a fixed annuity and is permitted a one-time right to convert from one to the other.

TVA employees may choose from a number of options regarding the payment arrangements of their retirement income from the pension and annuity. They may choose to receive a maximum monthly amount with no survivor benefit reduction or choose a reduced benefit to provide a continuing benefit to a survivor. The survivor benefit can take any one of several forms, including: (1) a lump-sum equal in amount to the accumulated contributions standing to the employee's credit; (2) a continuance throughout life of the survivor of the same amount the retiree was receiving; or (3) an option designed to meet the employee's specific needs. The designated beneficiary or estate of an employee who dies in service will receive the employee's accumulated annuity contributions and 50 percent of the employee's annual salary plus 5 percent of annual salary for each year of creditable service up to a maximum benefit of 200 percent of the annual salary.

The normal retirement age is 65 years. An early retirement benefit is payable to any employee who has completed 10 years of creditable service, or to an employee who has attained age 60. The early retiree receives a deferred retirement benefit, beginning at age 55 or later, which is the annuity equal to the actuarial equivalent (an equal present value) of the employee's accumulated contributions and a pension reduced by the actuarial equivalent of the social security offset. The pension, if commencing at age 60 or over, is computed under the same method used for a normal retirement benefit. If the pension commences at or after age 55, but before age 60, it is computed as for a normal retirement benefit and reduced for each month the employee lacks of attaining age 60. Any employee whose service is discontinued through no act of delinquency of his own and who has 5 or more years of creditable service is eligible for an involuntary retirement benefit. That benefit is computed under the same method as an early retirement benefit, except the employee can get an actuarially reduced immediate benefit at his attained age.

Other Features

The level-income plan is a distinctive feature of the TVA retirement system. Under this option, an employee who retirees before age 62 (and thus, before eligible to receive a social security benefit) may choose to receive a pension increased to be actuarially equivalent to the social security benefit estimated to be payable at age 62 plus the pension. Then at age 62 the TVA pension will be reduced so that it, in combination with social security, will equal the amount paid up to age 62 by the increased pension itself. The effect is to provide to the early retiree a level-income flow from the pension and social security parts of the TVA retirement income arrangement. Under certain circumstances, surviving spouses eligible for a monthly benefit from the TVA system may elect to receive an adjusted benefit under the level-income plan.

The TVA retirement system also provides a voluntary retirement savings and investment plan for members. The savings plan is tax-sheltered and has four funds, some with fixed, others with fluctuating, rates of return. An employee may participate in one or more of the funds. Contributions to the savings plan and to the retirement annuity may combine to be as much as 16 percent of base salary for all years of creditable service. At retirement, a member has several choices for distribution of holdings in the savings plan.

Funding

The TVA retirement pension and annuity are fully funded by TVA on a current basis. Financing of the system comes from the employee contributions, which accumulate toward the annuity portion, and agency funds for the pension. The latter are derived from earnings arising from the operation of TVA and general Treasury appropriations. The cost of the system varies from year to year; employee and employer contribution rates are established annually by the Retirement System Board based on a valuation made by an independent actuarial firm. TVA's contribution rate for the pension, expressed as a percent of basic payroll, was 11.5 percent for fiscal year 1982, the same as it was for the previous 3 years. That figure is the sum of 7.05 percent for funding currently accruing benefits, 2.72 percent for the accrued liability, 1.67 percent for cost-of-living payments, and 0.06 percent for medical insurance benefits. On the average, employees contributed 4.94 percent of regular pay during fiscal year 1981 to their annuity fund. During that same period, the TVA retirement system paid out more than $37 million in retirement benefits to nearly 6,000 retirees and survivors of retirees.